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RESEARCH REPORT

OF THE

ENVIRONMENTAL DATA FOR AIR-OVER-GROUND

RADIATION TRANSPORT (1992 - 1993)

CRAIG R. HEIMBACH

RADIATION SIMULATION AND ANALYSIS DIRECTORATE

U.S. ARMY ABERDEEN TEST CENTER
ABERDEEN PROVING GROUND, MD 21005-5059

APRIL 1996

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U.S. ARMY TEST AND EVALUATION COMMAND
ABERDEEN PROVING GROUND, MD 21005-5055

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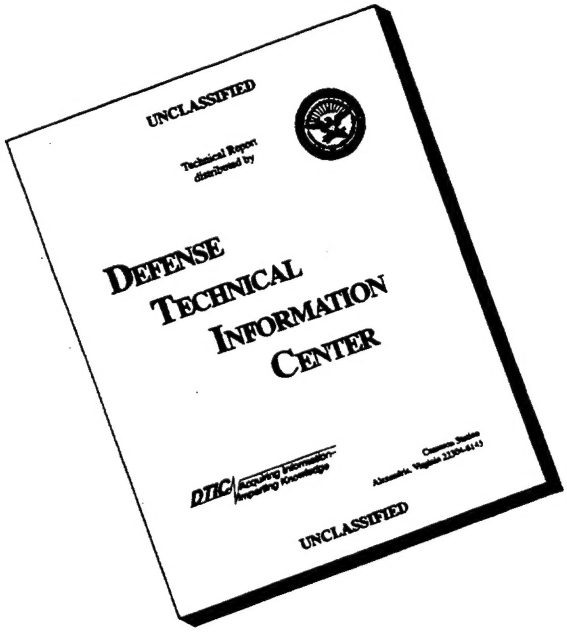

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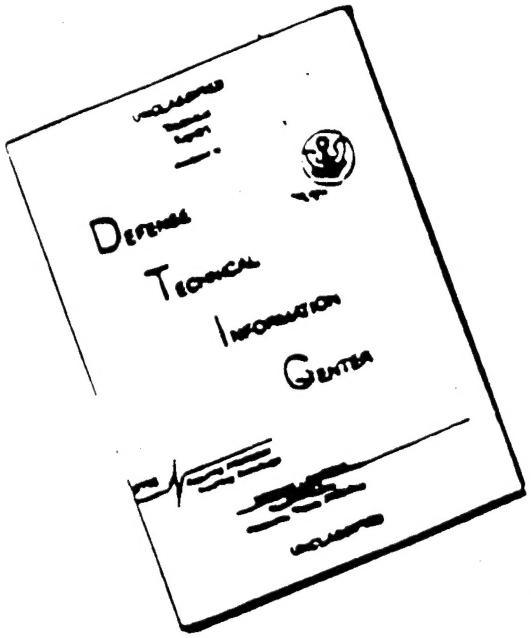

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Radiation transport measurements from 60 to 2000 meters from a neutron source have been previously reported. This report contains weather data, ground moisture monitoring results, and reactor run sheets which cover the times the measurements were made.

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ENVIRONMENTAL DATA FOR AIR-OVER-GROUND RADIATION TRANSPORT (1992 - 1993)

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Radiation measurements have been made to investigate neutron and gamma-ray transport in an air-over-ground geometry[1]. The radiation source was the research reactor at Aberdeen Proving Ground (APG), Maryland. Measurements were made from 60 to 2000 meters from the source.

Due to the long distances involved, the exact parameters of the atmosphere could have an effect on the transmission of radiation. In addition, ground moisture could affect the thermal neutron and secondary gamma-ray levels.

The run sheets used for the various experiments define most of the parameters of the radiation source. This includes the times and power levels of each run, as well as diagnostics which ensure the integrity of the runs.

In the interest of documenting the information required to interpret the radiation measurements, the run sheets, the weather data, and the ground moisture measurements are listed in Appendix A. This report should be used as a supplement to Reference 1.

[1] Research Report of the Radiation Transport in Air-Over-Ground Geometry (Summary 1992-1993), C.R. Heimbach, M.A. Oliver, M.B. Stanka, ATC-7793, 1995.

(Page 2 Blank)

Weather

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 24
Latitude : 39.50 29 APR 1991 Main Front
Longitude : 76.13

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBGT F
100	1020.3	54.5	51	89	5	13	19	30.13	1.2487	30.103	88	0.00	55	54	51
200	1020.4	54.1	51	80	5	12	18	30.13	1.2497	30.105	89	0.00	54	54	51
300	1020.4	53.6	51	66	6	12	16	30.13	1.2507	30.105	90	0.00	54	54	49
400	1020.3	53.6	51	70	5	11	16	30.13	1.2509	30.103	91	0.00	54	54	50
500	1020.2	53.4	51	80	6	14	16	30.13	1.2513	30.101	93	0.00	54	53	48
600	1020.4	52.9	51	75	6	12	16	30.13	1.2526	30.107	95	0.00	53	53	49
700	1020.6	53.4	52	75	5	10	18	30.14	1.2518	30.111	95	0.00	54	53	50
800	1020.8	54.0	52	82	4	10	19	30.15	1.2506	30.119	93	0.00	54	54	52
900	1020.8	54.2	52	68	4	9	15	30.15	1.2502	30.119	93	0.00	55	54	53
1000	1020.7	54.1	53	72	4	8	18	30.14	1.2505	30.114	96	0.00	55	54	53
1100	1020.5	55.5	54	74	5	11	16	30.13	1.2470	30.108	96	0.00	56	55	52
1200	1020.5	57.5	56	75	3	9	24	30.14	1.2424	30.110	94	0.00	59	56	57
1300	1019.8	59.6	57	78	4	8	22	30.12	1.2368	30.089	91	0.00	60	59	59
1400	1019.5	60.9	58	61	5	10	17	30.10	1.2335	30.078	90	0.00	62	60	58
1500	1019.3	61.5	58	82	5	11	19	30.10	1.2320	30.072	89	0.00	62	61	59
1600	1019.2	61.4	58	103	3	9	20	30.10	1.2321	30.072	89	0.00	62	61	61
1700	1019.0	61.4	58	107	4	9	20	30.09	1.2319	30.066	89	0.00	62	61	61
1800	1018.6	61.3	58	100	5	11	19	30.08	1.2316	30.052	89	0.00	62	61	59
1900	1018.8	60.1	57	106	4	11	19	30.08	1.2344	30.058	90	0.00	61	60	59
2000	1019.1	59.3	57	110	5	10	18	30.09	1.2365	30.066	91	0.00	60	59	57
2100	1019.2	58.4	56	107	4	10	19	30.10	1.2388	30.069	93	0.00	59	58	58
2200	1019.4	57.9	56	118	3	7	20	30.10	1.2403	30.077	95	0.00	58	58	58
2300	1018.8	57.4	56	102	3	7	21	30.09	1.2407	30.060	95	0.00	58	57	57
2400	1018.4	56.8	56	114	2	5	22	30.07	1.2417	30.048	96	0.00	57	57	57
Min	1018.4	52.9	51	-	2	5	15	30.07	1.2316	30.048	88	0.00	53	53	48
Ave	1019.8	57.0	55	85	4	10	19	30.11	1.2428	30.088	92	0.00	57	57	55
Max	1020.8	61.5	58		6	14	24	30.15	1.2526	30.119	96	0.00	62	61	61
STD	.4	3.1	3		1	2	2	.02	.0077	.023	3	0.00	3	3	4
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 24
Latitude : 39.50 30 APR 1991 Main Front
Longitude : 76.13

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBGT F
100	1017.7	56.5	56	118	2	7	23	30.05	1.2415	30.027	97	0.00	57	56	57
200	1017.1	56.3	56	90	3	6	21	30.03	1.2412	30.008	98	0.00	56	56	56
300	1016.4	56.3	56	101	3	7	17	30.01	1.2404	29.988	98	0.00	56	56	56
400	1015.6	56.2	56	96	3	8	18	29.99	1.2395	29.964	98	0.00	56	56	56
500	1014.4	56.2	56	84	4	9	17	29.95	1.2382	29.928	98	0.00	56	56	55
600	1014.5	56.4	56	9	3	10	15	29.96	1.2378	29.933	99	0.00	57	56	56
700	1015.0	56.9	57	55	3	6	19	29.97	1.2373	29.946	99	0.00	57	57	57
800	1014.9	56.9	57	73	4	7	17	29.97	1.2372	29.943	99	0.00	57	57	57
900	1014.6	57.5	57	88	3	6	28	29.96	1.2357	29.936	99	0.00	58	57	57
1000	1014.7	58.9	58	16	1	3	24	29.96	1.2327	29.936	99	0.00	60	58	59
1100	1014.7	60.5	60	212	2	4	29	29.97	1.2292	29.939	98	0.00	62	59	60
1200	1014.0	61.9	61	188	2	5	30	29.94	1.2253	29.917	97	0.00	62	62	62
1300	1013.5	65.1	63	258	4	8	28	29.93	1.2178	29.903	94	0.00	68	62	64
1400	1013.1	70.1	66	249	3	9	37	29.92	1.2066	29.892	87	0.00	72	68	70
1500	1012.6	73.3	68	231	4	8	26	29.90	1.1990	29.877	82	0.00	75	71	73
1600	1011.9	71.4	66	166	4	7	19	29.88	1.2020	29.855	83	0.00	73	71	71
1700	1011.5	73.1	67	193	4	8	16	29.87	1.1982	29.845	82	0.00	74	72	73
1800	1011.1	73.8	68	216	3	7	11	29.86	1.1964	29.832	82	0.00	75	73	74
1900	1011.1	74.0	69	212	2	4	26	29.86	1.1960	29.832	83	0.00	75	71	74
2000	1011.8	68.1	65	338	1	2	27	29.88	1.2092	29.852	91	0.00	71	66	68
2100	1012.2	65.4	64	251	1	2	15	29.89	1.2156	29.866	94	0.00	66	65	65
2200	1012.6	63.9	63	213	1	3	35	29.90	1.2193	29.877	95	0.00	65	63	64
2300	1012.5	63.4	62	190	1	2	16	29.90	1.2202	29.873	96	0.00	64	63	63
2400	1012.6	60.5	59	191	2	4	26	29.90	1.2265	29.877	96	0.00	63	59	61
Min	1011.1	56.2	56		1	2	11	29.86	1.1960	29.832	82	0.00	56	56	55
Ave	1013.8	63.0	61	152	3	6	23	29.94	1.2226	29.910	94	0.00	64	62	63
Max	1017.7	74.0	69		4	10	37	30.05	1.2415	30.027	99	0.00	75	73	74
STD	1.7	6.6	5		1	2	7	.06	.0162	.055	6	0.00	7	6	7
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 24
Latitude : 39.50 1 MAY 1991 Main Front
Longitude : 76.13

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp F
100	1012.7	57.5	57	328	1	3	29	29.90	1.2333	29.878	97	0.00	60	56	
200	1012.7	56.2	55	16	2	5	13	29.91	1.2360	29.879	96	0.00	57	56	
300	1012.5	53.4	51	149	1	3	21	29.90	1.2417	29.872	90	0.00	56	52	
400	1012.5	51.2	49	331	1	4	33	29.90	1.2469	29.874	93	0.00	52	50	
500	1012.7	54.3	46	10	3	5	16	29.91	1.2391	29.879	75	0.00	56	52	
600	1012.9	51.8	48	188	1	3	34	29.91	1.2457	29.886	86	0.00	54	50	
700	1013.2	57.7	54	217	1	3	22	29.92	1.2329	29.894	87	0.00	64	53	
800	1013.1	67.6	56	230	1	3	22	29.92	1.2099	29.891	66	0.00	70	64	
900	1013.0	72.2	52	190	3	7	22	29.91	1.1985	29.888	48	0.00	74	70	
1000	1012.7	72.2	50	149	5	10	22	29.91	1.1979	29.879	46	0.00	73	72	
1100	1012.4	74.6	52	155	5	11	23	29.90	1.1924	29.871	45	0.00	76	73	
1200	1011.7	77.2	52	164	6	13	23	29.88	1.1859	29.849	42	0.00	78	76	
1300	1010.4	79.0	53	178	6	12	22	29.84	1.1805	29.811	40	0.00	80	78	
1400	1009.2	79.7	53	198	7	14	17	29.80	1.1776	29.776	39	0.00	80	79	
1500	1008.3	79.9	54	211	9	16	15	29.78	1.1764	29.750	40	0.00	81	79	
1600	1007.2	78.3	54	222	10	16	12	29.74	1.1786	29.716	44	0.00	79	78	
1700	1006.3	77.9	54	213	9	15	13	29.72	1.1784	29.691	43	0.00	79	77	
1800	1005.5	76.1	52	208	7	15	12	29.69	1.1812	29.667	44	0.00	77	75	
1900	1005.6	72.8	50	216	4	8	19	29.69	1.1881	29.668	44	0.00	75	70	
2000	1007.3	65.6	56	263	6	20	31	29.75	1.2077	29.719	72	.04	70	63	
2100	1007.9	61.3	58	7	3	10	31	29.77	1.2187	29.739	90	0.00	63	60	
2200	1007.7	58.2	57	358	1	3	33	29.76	1.2256	29.733	95	0.00	60	57	
2300	1008.0	56.8	56		0	2	28	29.77	1.2290	29.741	96	0.00	57	56	
2400	1008.5	55.3	54	118	1	2	45	29.78	1.2329	29.754	97	0.00	56	54	
Min	1005.5	51.2	46		0	2	12	29.69	1.1764	29.667	39	0.00	52	50	
Ave	1010.2	66.1	53	202	4	9	23	29.83	1.2098	29.804	67	.00	68	65	
Max	1013.2	79.9	58		10	20	45	29.92	1.2469	29.894	97	.04	81	79	
STD	2.8	10.5	3		3	6	8	.08	.0255	.080	24	.01	10	11	
Tot												.04			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 12
Latitude : 39.30 2 MAY 1991 H-Field
Longitude : 76.27

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	MinWBG TmpTmp F F
100	1009.0	58.1	56	319	4	7	15	29.80	1.2277	29.782	94	0.00	59	57
200	1009.5	57.6	56	321	4	7	9	29.81	1.2297	29.798	95	0.00	58	57
300	1010.1	58.7	57	332	4	9	15	29.83	1.2280	29.816	94	0.00	59	58
400	1010.7	58.1	56	351	4	6	17	29.85	1.2297	29.832	93	0.00	59	57
500	1011.1	56.8	55	322	3	4	10	29.86	1.2333	29.845	94	0.00	58	56
600	1011.7	55.8	55	313	3	4	11	29.87	1.2361	29.861	95	0.00	56	55
700	1012.0	59.5	55	273	6	11	12	29.88	1.2279	29.871	86	0.00	61	56
800	1012.2	62.3	49	285	8	15	11	29.89	1.2204	29.876	61	0.00	63	61
900	1012.0	64.2	45	285	11	21	14	29.88	1.2151	29.871	49	0.00	65	64
1000	1011.8	65.0	43	291	11	22	15	29.88	1.2128	29.865	45	0.00	66	64
1100	1011.4	65.6	43	285	13	23	13	29.87	1.2109	29.855	44	0.00	67	64
1200	1010.9	66.4	42	280	13	25	14	29.85	1.2082	29.838	42	0.00	68	65
1300	1010.3	67.2	42	283	14	25	12	29.84	1.2057	29.822	39	0.00	68	66
1400	1010.1	67.9	41	290	13	23	14	29.83	1.2038	29.815	38	0.00	70	67
1500	1009.8	68.5	40	289	14	26	12	29.82	1.2019	29.806	35	0.00	69	67
1600	1009.6	68.4	39	298	13	25	12	29.81	1.2019	29.801	34	0.00	69	67
1700	1009.8	68.0	38	305	12	22	12	29.82	1.2030	29.807	34	0.00	69	67
1800	1010.1	67.3	37	304	12	22	12	29.83	1.2047	29.814	33	0.00	69	66
1900	1010.4	65.4	36	305	10	23	11	29.84	1.2093	29.824	34	0.00	66	64
2000	1010.7	63.7	36	324	5	12	12	29.85	1.2136	29.834	36	0.00	64	63
2100	1010.7	61.7	37	326	1	4	13	29.85	1.2185	29.834	40	0.00	63	60
2200	1010.7	60.3	38	327	2	6	10	29.85	1.2217	29.832	43	0.00	61	60
2300	1010.4	56.2	39	300	2	3	11	29.84	1.2313	29.825	53	0.00	60	54
2400	1010.3	52.4	43	286	2	3	9	29.83	1.2407	29.821	70	0.00	54	51
Min	1009.0	52.4	36		1	3	9	29.80	1.2019	29.782	33	0.00	54	51
Ave	1010.6	62.3	45	296	8	15	12	29.84	1.2182	29.831	58	0.00	63	61
Max	1012.2	68.5	57		14	26	17	29.89	1.2407	29.876	95	0.00	70	67
STD	.7	4.8	8		5	9	2	.01	.0121	.029	25	0.00	5	5
Tot												0.00		

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 24
Latitude : 39.50 3 MAY 1991 Main Front
Longitude : 76.13

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	MinWBG TmpTmp F F
100	1010.4	49.8	44	38	1	3	30	29.84	1.2469	29.810	81	0.00	50	49
200	1009.4	47.8	43	23	2	4	20	29.81	1.2503	29.781	83	0.00	49	46
300	1010.8	50.1	43	327	7	26	12	29.85	1.2466	29.824	77	0.00	54	46
400	1011.6	52.5	44	291	9	28	12	29.87	1.2417	29.846	73	0.00	54	51
500	1011.4	50.2	46	250	5	9	9	29.87	1.2474	29.839	85	.01	51	50
600	1011.5	49.5	47	262	5	8	9	29.87	1.2492	29.842	89	0.00	50	49
700	1012.0	51.7	47	296	6	13	12	29.88	1.2447	29.857	85	0.00	54	50
800	1012.6	53.7	46	319	8	15	15	29.90	1.2402	29.874	74	0.00	56	53
900	1013.2	55.5	43	341	10	19	17	29.92	1.2363	29.895	62	0.00	57	54
1000	1014.0	56.7	42	324	10	18	16	29.94	1.2343	29.917	57	0.00	58	56
1100	1014.4	58.5	41	319	11	20	19	29.95	1.2302	29.928	52	0.00	60	56
1200	1014.2	60.8	41	310	9	19	21	29.95	1.2246	29.922	49	0.00	62	60
1300	1013.8	62.4	42	314	10	21	19	29.94	1.2204	29.910	48	0.00	64	61
1400	1013.4	64.5	43	314	10	24	18	29.93	1.2153	29.899	46	0.00	65	64
1500	1013.1	65.3	43	326	10	19	15	29.92	1.2130	29.891	44	0.00	66	65
1600	1013.1	66.1	43	308	9	17	15	29.92	1.2112	29.891	43	0.00	67	65
1700	1013.0	66.3	42	317	10	18	14	29.91	1.2106	29.888	42	0.00	67	66
1800	1013.5	66.2	42	309	8	16	16	29.93	1.2113	29.903	41	0.00	67	66
1900	1013.9	63.9	41	315	5	13	11	29.94	1.2168	29.913	42	0.00	66	61
2000	1014.3	58.0	39	308	4	6	8	29.95	1.2312	29.925	49	0.00	61	56
2100	1014.6	54.5	40	304	2	5	23	29.96	1.2401	29.936	58	0.00	56	52
2200	1014.9	52.5	42	6	5	11	9	29.97	1.2454	29.942	67	0.00	55	51
2300	1015.6	54.4	41	6	5	11	16	29.99	1.2416	29.965	61	0.00	55	53
2400	1016.1	52.7	40	5	7	13	18	30.01	1.2461	29.979	62	0.00	53	52
Min	1009.4	47.8	39		1	3	8	29.81	1.2106	29.781	41	0.00	49	46
Ave	1013.1	56.8	43	319	7	15	16	29.92	1.2331	29.891	61	.00	58	56
Max	1016.1	66.3	47		11	28	30	30.01	1.2503	29.979	89	.01	67	66
STD	1.5	6.2	2		3	7	5	.05	.0140	.050	16	.00	6	6
Tot												.01		

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 24
Latitude : 39.50 4 MAY 1991 Main Front
Longitude : 76.13

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	MinWBG TmpTmp F F
100	1016.4	51.2	39	4	6	13	18	30.01	1.2502	29.987	63	0.00	52	50
200	1016.8	48.3	38	26	2	8	38	30.02	1.2576	29.998	67	0.00	49	47
300	1017.0	45.0	38	311	2	5	41	30.03	1.2661	30.007	77	0.00	47	43
400	1017.0	42.5	39	244	1	4	40	30.03	1.2725	30.007	87	0.00	43	42
500	1017.1	42.6	38	4	2	4	13	30.03	1.2722	30.007	85	0.00	43	42
600	1017.9	43.1	39	182	1	2	21	30.06	1.2722	30.031	87	0.00	46	42
700	1018.7	51.3	44	341	3	7	23	30.08	1.2534	30.055	76	0.00	55	46
800	1019.0	55.5	43	353	6	12	19	30.09	1.2433	30.065	63	0.00	57	55
900	1018.9	58.3	44	354	6	11	21	30.09	1.2366	30.062	59	0.00	59	57
1000	1018.7	61.5	45	353	6	12	23	30.08	1.2290	30.057	54	0.00	63	59
1100	1018.4	63.1	44	346	6	13	31	30.07	1.2246	30.048	49	0.00	64	63
1200	1017.9	65.0	44	322	5	13	33	30.06	1.2196	30.032	47	0.00	66	64
1300	1017.2	67.3	44	335	4	15	37	30.04	1.2135	30.012	43	0.00	69	66
1400	1016.9	67.1	45	141	5	11	24	30.03	1.2138	30.002	45	0.00	69	66
1500	1016.6	68.2	45	179	5	10	24	30.02	1.2109	29.994	44	0.00	69	67
1600	1016.6	66.7	44	182	5	10	17	30.02	1.2141	29.993	44	0.00	69	66
1700	1016.4	68.0	45	178	4	8	21	30.01	1.2110	29.988	43	0.00	69	66
1800	1016.6	68.6	44	163	3	6	19	30.02	1.2100	29.994	42	0.00	69	68
1900	1016.8	65.2	47	183	1	3	14	30.03	1.2182	30.000	51	0.00	68	61
2000	1017.4	57.7	48	213	2	3	5	30.04	1.2368	30.017	70	0.00	61	55
2100	1018.2	54.9	48	219	2	3	12	30.07	1.2445	30.042	77	0.00	55	54
2200	1018.6	53.9	48	180	1	2	20	30.08	1.2474	30.052	81	0.00	54	52
2300	1018.8	50.6	48	224	1	2	12	30.09	1.2559	30.060	91	0.00	52	50
2400	1019.0	48.8	47	292	1	1	14	30.09	1.2603	30.064	95	0.00	50	48
Min	1016.4	42.5	38		1	1	5	30.01	1.2100	29.987	42	0.00	43	42
Ave	1017.6	56.9	44	333	3	8	22	30.05	1.2389	30.024	64	0.00	58	55
Max	1019.0	68.6	48		6	15	41	30.09	1.2725	30.065	95	0.00	69	68
STD	1.2	9.1	3		2	4	10	.02	.0219	.013	18	0.00	9	9
Tot												0.00		

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 24
Latitude : 39.50 5 MAY 1991 Main Front
Longitude : 76.13

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	MinWBG TmpTmp F F
100	1019.1	47.6	47		0	2	5	30.09	1.2634	30.066	96	0.00	48	47
200	1019.0	46.5	46	19	1	3	11	30.09	1.2659	30.064	97	0.00	47	46
300	1019.5	45.5	45	13	1	3	6	30.11	1.2688	30.080	98	0.00	46	45
400	1019.6	45.1	45	231	1	3	25	30.11	1.2699	30.083	98	0.00	46	45
500	1020.2	43.9	43	315	1	2	15	30.13	1.2734	30.099	98	0.00	45	43
600	1020.5	46.8	46		0	2	23	30.14	1.2670	30.109	98	0.00	52	44
700	1021.0	55.7	52	47	4	8	12	30.15	1.2468	30.125	88	0.00	58	52
800	1021.0	58.5	48	61	4	9	15	30.15	1.2394	30.123	69	0.00	59	58
900	1020.9	63.0	51	68	3	8	25	30.15	1.2289	30.120	64	0.00	65	59
1000	1020.7	65.6	51	101	4	10	29	30.14	1.2226	30.115	58	0.00	67	65
1100	1020.7	68.8	50	146	3	7	35	30.14	1.2149	30.114	50	0.00	70	67
1200	1020.6	71.6	50	183	3	9	33	30.14	1.2087	30.113	47	0.00	73	70
1300	1020.0	72.2	50	198	4	9	24	30.12	1.2065	30.095	45	0.00	73	71
1400	1019.5	72.5	51	195	4	9	24	30.10	1.2053	30.078	46	0.00	74	71
1500	1018.3	74.1	52	136	4	9	29	30.07	1.2005	30.045	45	0.00	75	73
1600	1017.7	74.5	51	132	3	9	32	30.05	1.1988	30.026	43	0.00	75	73
1700	1017.5	72.1	51	213	5	10	16	30.05	1.2039	30.019	48	0.00	75	71
1800	1017.3	69.7	54	147	3	7	25	30.04	1.2095	30.013	57	0.00	71	69
1900	1017.4	68.2	52	169	4	8	23	30.04	1.2128	30.017	55	0.00	69	68
2000	1017.3	66.8	51	161	4	10	21	30.04	1.2158	30.014	56	0.00	68	66
2100	1017.6	66.2	48	147	5	11	20	30.05	1.2171	30.024	52	0.00	67	65
2200	1017.6	64.7	47	143	5	11	20	30.05	1.2205	30.025	53	0.00	65	64
2300	1017.1	63.7	47	139	4	12	18	30.04	1.2223	30.009	55	0.00	64	63
2400	1016.6	62.2	50	125	3	9	20	30.02	1.2256	29.995	64	0.00	63	59
Min	1016.6	43.9	43		0	2	5	30.02	1.1988	29.995	43	0.00	45	43
Ave	1019.0	61.9	49	143	3	7	21	30.09	1.2295	30.066	66	0.00	63	61
Max	1021.0	74.5	54		5	12	35	30.15	1.2734	30.125	98	0.00	75	73
STD	1.7	10.5	3		1	3	8	.05	.0254	.043	21	0.00	10	11
Tot												0.00		

SKY CONDITION RECORD

SPESUTIE ISLAND OBSERVATION SITE

Times listed are real time – no corrections are necessary

DATE 1991	TIME	SKY CONDITION (x 100 = Height in feet)	VISIBILITY (Miles)	TOTAL SKY COVER 1/10's	TOTAL OPAQUE
29 Apr	0800	12 ⊕	7	10	10
	0900	12 ⊕	5F	10	10
	1000	5 ⊕	1¼L-F	10	10
	1100	6 ◐ 12 ⊕	4F	10	10
	1200	8 ◐ 12 ⊕	5F	10	10
	1300	12 ⊕	6F	10	10
	1400	12 ⊕	6F	10	10
	1500	12 ⊕	5F	10	10
	1600	14 ⊕	6F	10	10
30 Apr	0800	W1X	¼F	10	10
	0900	W1X	¼F	10	10
	1000	W1X	¼F	10	10
	1100	W1X	¼F	10	10
	1200	W1X	¼F	10	10
	1300	W1X	3/16F	10	10
	1400	-X8 ⊕	1½F	10	10
	1500	18 ◐ 300- ◐	5H	5	2
	1600	20 ◐ 300	6H	3	1
01 May	0800	270 ◐	10	3	2
	0900	270 ◐	10	2	2
	1000	270 ◐	10	2	2
	1100	270 ◐	10	2	2
	1200	270 ◐	10	1	1
	1300	270 ◐	10	1	1
	1400	○	10	0	0
	1500	○	10	0	0
	1600	○	10	0	0
02 May	0800	○	10	0	0
	0900	○	10	0	0
	1000	40 ◐	10	1	1
	1100	40 ◐	10	1	1
	1200	45 ◐	10	2	2
	1300	45 ◐	10	3	3
	1400	45 ◐	10	3	3
	1500	45 ◐	10	2	2
	1600	45 ◐	10	2	2
03 May	0800	80 ◐	10	1	1
	0900	65 ◐ 80 ⊕	10	9	9
	1000	65 ◐ 80 ⊕	10	7	7
	1100	85 ◐	10	3	3
	1200	85 ◐	10	1	1
	1300	○	10	0	0
	1400	45 ◐	10	1	1
	1500	45 ◐	10	1	1
	1600	○	10	0	0

KEY

GF= Ground Fog
F= Fog
H= Haze
K= Smoke
BS= Blowing Snow
BN= Blowing Sand
BD= Blowing Dust
IF= Ice Fog
D= Dust
BY= Blowing Spray

****

T= Thunderstorm
T+= Severe Thunderstorm
R= Rain
RW= Rainshower
L= Drizzle
ZR= Freezing Rain
ZL= Freezing Drizzle
IP= Ice Pellets (Sleet)
IPW= Ice Pellet Shower
S= Snow
SW= Snow Shower
SP= Snow Pellets
SG= Snow Grains
IC= Ice Crystals
A= Hail

****

Intensity of precip.:
– = Light
+ = Heavy
No symbol = Moderate

****

Sky Condition:
○ = Clear = less than 1/10
◐ = Scattered = 1/10–5/10
◍ = Broken = 6/10–9/10
⊕ = Overcast = 10/10 of sky is covered.

NOTE: A layer of clouds is considered to be thin if ½ or more of it is transparent; the sky condition symbol will be preceded by a (–) in such cases.
Visibilities of 7 or more miles are classified as unrestricted.
(– X) = sky partially obscured by surface based phenomena
(W 2 X) = sky completely obscured; vertical visibility is 200 feet

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 21 MAR 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1014.1	29.0	21	283	2	4	8	29.95	1.2986	29.928	72	0.00	30	28	29
200	1014.2	29.2	22	284	2	4	12	29.95	1.2981	29.931	74	0.00	30	28	29
300	1014.0	31.6	24	320	2	5	19	29.94	1.2913	29.925	74	0.00	33	29	32
400	1014.0	33.0	26	13	5	10	12	29.94	1.2876	29.926	75	0.00	34	32	27
500	1014.6	33.2	27	9	5	11	15	29.96	1.2875	29.942	78	0.00	34	33	28
600	1015.4	33.5	24	25	7	11	10	29.99	1.2882	29.967	69	0.00	34	33	25
700	1016.4	33.0	23	19	6	10	11	30.01	1.2906	29.995	67	0.00	33	33	26
800	1017.1	33.5	25	7	6	12	14	30.04	1.2904	30.018	69	0.00	34	33	26
900	1017.6	34.0	25	359	6	11	17	30.05	1.2896	30.031	69	0.00	35	34	26
1000	1017.8	36.0	26	353	6	12	17	30.06	1.2846	30.038	66	0.00	37	35	29
1100	1017.9	38.6	26	340	5	10	19	30.06	1.2780	30.040	60	0.00	40	37	34
1200	1017.8	38.5	24	327	7	15	19	30.06	1.2782	30.038	55	0.00	39	38	30
1300	1018.0	38.6	25	344	9	18	19	30.06	1.2783	30.044	58	0.00	40	37	27
1400	1017.9	39.5	24	325	9	18	15	30.06	1.2757	30.039	54	0.00	41	38	27
1500	1017.9	41.3	21	336	9	20	19	30.06	1.2715	30.041	44	0.00	42	40	30
1600	1018.3	40.5	18	339	9	19	19	30.07	1.2743	30.053	41	0.00	41	40	28
1700	1018.4	39.2	17	355	9	19	18	30.07	1.2777	30.056	41	0.00	40	38	26
1800	1018.9	37.9	16	357	8	15	17	30.09	1.2816	30.071	41	0.00	39	37	27
1900	1019.4	36.2	16	11	8	13	12	30.10	1.2869	30.085	43	0.00	37	35	25
2000	1020.0	34.9	15	18	7	12	9	30.12	1.2911	30.103	44	0.00	35	34	25
2100	1020.6	33.8	15	21	5	9	10	30.14	1.2946	30.120	45	0.00	34	34	28
2200	1020.8	33.1	14	29	5	9	10	30.14	1.2966	30.125	45	0.00	34	32	30
2300	1020.5	32.2	14	28	3	6	10	30.13	1.2987	30.116	46	0.00	33	32	32
2400	1019.9	32.5	16	47	6	12	10	30.12	1.2969	30.098	51	0.00	33	32	25
Min	1014.0	29.0	14		2	4	8	29.94	1.2715	29.925	41	0.00	30	28	25
Ave	1017.6	35.1	21	358	6	12	14	30.05	1.2869	30.030	58	0.00	36	34	28
Max	1020.8	41.3	27		9	20	19	30.14	1.2987	30.125	78	0.00	42	40	34
STD	2.2	3.4	4		2	5	4	.06	.0083	.065	13	0.00	4	3	2
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50
Longitude : 76.07

22 MAR 1992

Spesutie Island

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1019.7	31.9	15	53	8	14	10	30.11	1.2984	30.094	50	0.00	32	32	19
200	1020.3	31.3	14	70	6	12	11	30.13	1.3009	30.111	48	0.00	32	31	24
300	1019.8	31.0	14	89	4	8	13	30.12	1.3012	30.097	49	0.00	31	31	28
400	1019.4	30.4	13	130	4	7	17	30.10	1.3021	30.083	49	0.00	31	30	30
500	1019.4	30.5	13	129	5	9	12	30.10	1.3019	30.083	47	0.00	31	30	25
600	1019.1	30.4	13	141	5	9	13	30.09	1.3017	30.077	47	0.00	31	30	26
700	1019.0	30.2	13	149	6	10	12	30.09	1.3020	30.072	48	0.00	31	30	23
800	1018.2	31.6	14	130	6	11	12	30.07	1.2972	30.048	48	0.00	33	31	23
900	1017.3	33.0	15	134	8	15	12	30.04	1.2925	30.024	48	0.00	33	33	21
1000	1016.3	33.7	16	146	8	15	12	30.01	1.2894	29.993	47	0.00	34	33	22
1100	1014.9	35.3	17	156	8	15	12	29.97	1.2834	29.953	48	0.00	36	34	24
1200	1013.4	36.3	20	159	8	15	14	29.92	1.2787	29.907	51	0.00	37	36	24
1300	1011.9	35.6	23	155	8	16	15	29.88	1.2783	29.863	60	0.00	36	35	23
1400	1009.9	34.8	28	149	8	15	12	29.82	1.2775	29.805	75	0.00	36	34	23
1500	1007.7	34.9	30	140	8	13	13	29.76	1.2743	29.740	82	0.00	35	34	23
1600	1005.8	33.8	31	147	7	12	11	29.70	1.2746	29.685	89	.01	34	34	23
1700	1004.0	33.3	31	141	6	10	10	29.65	1.2735	29.629	90	.04	34	33	25
1800	1003.1	33.6	31	110	4	9	12	29.62	1.2715	29.604	90	.05	34	33	31
1900	1002.8	34.2	32	38	5	8	12	29.61	1.2695	29.595	90	.09	35	34	30
2000	1002.8	34.6	32	37	5	7	10	29.61	1.2685	29.595	90	.04	35	34	30
2100	1002.8	35.1	32	36	3	6	12	29.61	1.2673	29.594	90	0.00	35	35	34
2200	1003.1	35.0	32	349	2	5	18	29.62	1.2679	29.603	90	0.00	35	35	35
2300	1003.3	34.4	32	271	2	5	18	29.63	1.2698	29.610	90	0.00	35	34	34
2400	1004.1	35.8	33	274	6	10	9	29.65	1.2670	29.633	90	0.00	37	35	30
Min	1002.8	30.2	13		2	5	9	29.61	1.2670	29.594	47	0.00	31	30	19
Ave	1011.6	33.4	23	128	6	11	13	29.87	1.2837	29.854	67	.01	34	33	26
Max	1020.3	36.3	33		8	16	18	30.13	1.3021	30.111	90	.09	37	36	35
STD	7.1	2.0	8		2	3	2	.21	.0138	.210	20	.02	2	2	5
Tot												.23			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50
Longitude : 76.07

23 MAR 1992

Spesutie Island

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1004.9	37.1	34	303	8	15	11	29.67	1.2647	29.656	87	0.00	37	37	26
200	1005.7	36.8	32	313	7	14	12	29.70	1.2666	29.681	84	0.00	37	37	27
300	1006.3	36.2	31	332	8	17	17	29.72	1.2689	29.698	81	0.00	37	36	26
400	1006.5	35.4	29	340	9	19	18	29.72	1.2715	29.705	78	0.00	36	35	23
500	1007.3	34.0	28	327	9	19	16	29.75	1.2762	29.728	77	0.00	35	33	20
600	1008.4	33.0	26	327	9	19	18	29.78	1.2804	29.759	76	0.00	33	33	20
700	1009.7	32.4	23	346	11	19	17	29.81	1.2838	29.797	69	0.00	33	32	16
800	1010.9	32.2	21	347	10	20	18	29.85	1.2861	29.834	64	0.00	33	32	16
900	1011.7	32.5	21	346	12	23	18	29.87	1.2862	29.856	63	0.00	33	32	14
1000	1012.3	32.9	20	349	11	23	18	29.89	1.2862	29.876	59	0.00	34	32	15
1100	1012.8	33.8	20	346	9	17	17	29.91	1.2843	29.888	57	0.00	34	34	20
1200	1012.7	34.7	21	343	9	19	18	29.90	1.2818	29.887	56	0.00	35	34	21
1300	1012.6	35.5	20	342	10	18	19	29.90	1.2796	29.883	53	0.00	36	35	21
1400	1012.3	36.0	19	351	9	18	19	29.89	1.2781	29.875	50	0.00	37	36	23
1500	1012.3	36.9	19	340	8	18	19	29.89	1.2757	29.874	47	0.00	38	36	25
1600	1012.6	37.6	18	326	9	18	17	29.90	1.2745	29.884	45	0.00	38	37	24
1700	1013.2	37.2	18	320	9	19	19	29.92	1.2761	29.902	45	0.00	38	37	24
1800	1014.3	36.7	17	332	8	17	18	29.95	1.2790	29.934	45	0.00	37	36	26
1900	1015.6	35.6	17	318	7	16	14	29.99	1.2835	29.971	47	0.00	36	35	25
2000	1016.8	34.4	18	306	8	15	12	30.03	1.2880	30.007	51	0.00	35	34	22
2100	1017.8	33.0	18	294	6	13	10	30.05	1.2931	30.037	53	0.00	34	31	26
2200	1018.5	30.4	15	270	4	9	7	30.07	1.3007	30.057	53	0.00	31	30	28
2300	1018.9	30.4	14	277	6	10	7	30.09	1.3014	30.069	50	0.00	31	30	22
2400	1019.4	29.6	13	273	5	9	7	30.10	1.3042	30.085	49	0.00	30	29	24
Min	1004.9	29.6	13		4	9	7	29.67	1.2647	29.656	45	0.00	30	29	14
Ave	1012.2	34.3	21	329	8	17	15	29.89	1.2821	29.873	60	0.00	35	34	22
Max	1019.4	37.6	34		12	23	19	30.10	1.3042	30.085	87	0.00	38	37	28
STD	4.2	2.3	6		2	4	4	.13	.0103	.125	14	0.00	2	2	4
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 24 MAR 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1019.9	28.0	12	308	1	5	22	30.12	1.3092	30.099	50	0.00	29	27	28
200	1020.2	29.8	13	318	4	7	14	30.12	1.3046	30.107	49	0.00	30	29	28
300	1020.3	28.4	13	293	3	7	10	30.13	1.3088	30.112	51	0.00	30	26	27
400	1021.0	26.2	12	265	4	7	6	30.15	1.3155	30.131	55	0.00	26	26	24
500	1021.5	26.5	12	277	5	8	7	30.16	1.3153	30.146	54	0.00	27	26	22
600	1022.1	27.4	14	288	4	8	10	30.18	1.3134	30.163	55	0.00	28	27	24
700	1023.3	27.9	14	272	4	6	9	30.22	1.3140	30.201	55	0.00	29	27	26
800	1024.5	31.6	16	289	6	10	10	30.25	1.3054	30.236	52	0.00	33	30	25
900	1025.3	34.5	18	314	8	14	12	30.28	1.2986	30.258	50	0.00	35	33	24
1000	1025.8	35.9	18	310	8	15	12	30.29	1.2954	30.272	48	0.00	37	35	25
1100	1025.9	38.8	18	305	6	11	13	30.29	1.2880	30.275	42	0.00	40	38	32
1200	1025.5	41.0	16	315	5	10	17	30.28	1.2822	30.266	35	0.00	42	40	36
1300	1025.3	42.9	15	300	6	15	17	30.28	1.2770	30.260	32	0.00	44	42	37
1400	1024.6	44.0	15	296	7	17	17	30.26	1.2732	30.238	31	0.00	45	43	36
1500	1024.4	45.5	17	300	9	17	15	30.25	1.2694	30.233	32	0.00	46	45	35
1600	1024.4	46.4	15	284	9	16	16	30.25	1.2671	30.233	28	0.00	47	46	36
1700	1024.7	46.4	15	290	8	17	16	30.26	1.2673	30.241	28	0.00	47	46	37
1800	1024.8	45.9	14	282	7	13	12	30.26	1.2689	30.244	28	0.00	47	45	38
1900	1025.7	43.6	12	279	6	13	8	30.29	1.2760	30.271	28	0.00	45	42	38
2000	1026.6	40.2	14	235	4	7	10	30.32	1.2857	30.297	35	0.00	42	38	39
2100	1027.4	37.2	21	219	5	8	6	30.34	1.2938	30.320	52	0.00	38	35	33
2200	1027.9	34.2	24	210	4	6	7	30.35	1.3021	30.334	65	0.00	36	34	31
2300	1028.0	34.5	24	221	5	6	3	30.36	1.3016	30.337	66	0.00	35	34	31
2400	1028.0	33.7	24	235	2	3	14	30.36	1.3037	30.340	68	0.00	35	33	34
Min	1019.9	26.2	12		1	3	3	30.12	1.2671	30.099	28	0.00	26	26	22
Ave	1024.5	36.3	16	285	5	10	12	30.25	1.2932	30.234	45	0.00	37	35	31
Max	1028.0	46.4	24		9	17	22	30.36	1.3155	30.340	68	0.00	47	46	39
STD	2.5	7.0	4		2	4	5	.07	.0169	.073	13	0.00	7	7	6
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 25 MAR 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1028.1	33.8	26	232	3	6	8	30.36	1.3033	30.343	72	0.00	34	33	33
200	1028.2	33.3	27	237	2	5	9	30.36	1.3045	30.344	79	0.00	34	33	33
300	1028.0	33.7	29	271	2	5	11	30.36	1.3031	30.340	84	0.00	34	33	34
400	1028.4	31.4	28	296	1	3	5	30.37	1.3098	30.349	88	0.00	32	30	31
500	1028.6	31.0	28	153	1	2	17	30.37	1.3111	30.355	89	0.00	32	30	31
600	1028.8	31.0	28	211	2	2	9	30.38	1.3116	30.363	89	0.00	32	30	31
700	1028.5	33.7	31	167	2	4	8	30.37	1.3036	30.354	89	0.00	36	32	34
800	1028.9	37.8	34	191	4	8	9	30.38	1.2932	30.365	86	0.00	39	36	35
900	1029.0	40.4	36	207	7	11	10	30.39	1.2864	30.369	83	0.00	42	39	32
1000	1028.7	43.6	37	211	7	12	13	30.38	1.2775	30.358	77	0.00	45	42	35
1100	1028.0	47.3	36	201	7	12	13	30.36	1.2675	30.340	66	0.00	49	45	39
1200	1027.3	50.0	36	203	7	11	15	30.34	1.2599	30.317	59	0.00	51	49	43
1300	1026.3	52.5	36	208	7	12	12	30.31	1.2527	30.289	53	0.00	54	51	46
1400	1025.4	55.0	34	196	11	20	11	30.28	1.2455	30.261	44	0.00	56	54	44
1500	1024.8	55.1	30	200	13	20	9	30.26	1.2451	30.244	39	0.00	56	54	42
1600	1024.5	53.8	29	191	12	18	9	30.25	1.2479	30.235	39	0.00	55	53	42
1700	1024.3	51.9	28	176	11	17	9	30.25	1.2524	30.228	39	0.00	53	51	40
1800	1023.8	50.0	26	170	12	22	9	30.23	1.2567	30.216	39	0.00	51	49	36
1900	1023.5	48.8	25	166	10	15	9	30.22	1.2594	30.207	40	0.00	49	48	38
2000	1023.4	48.3	26	162	9	16	10	30.22	1.2604	30.202	41	0.00	49	48	38
2100	1023.9	46.7	24	165	8	14	10	30.24	1.2652	30.218	40	0.00	48	46	37
2200	1023.7	45.1	24	164	7	13	10	30.23	1.2689	30.212	44	0.00	46	44	37
2300	1023.4	44.2	27	174	5	9	11	30.22	1.2706	30.204	50	0.00	44	44	40
2400	1023.2	43.5	32	197	3	7	13	30.21	1.2715	30.196	63	0.00	44	43	43
Min	1023.2	31.0	24		1	2	5	30.21	1.2451	30.196	39	0.00	32	30	31
Ave	1026.3	43.4	30	189	6	11	10	30.31	1.2762	30.288	62	0.00	44	42	37
Max	1029.0	55.1	37		13	22	17	30.39	1.3116	30.369	89	0.00	56	54	46
STD	2.3	8.3	4		4	6	3	.07	.0231	.067	20	0.00	8	8	5
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 26 MAR 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1022.7	43.0	34	81	2	5	15	30.20	1.2718	30.182	71	0.00	43	43	43
200	1022.3	42.5	38	62	3	6	21	30.19	1.2722	30.170	84	0.00	43	42	43
300	1021.2	42.4	39	79	4	6	9	30.16	1.2711	30.138	87	.01	43	42	40
400	1020.6	42.1	39	63	4	6	9	30.14	1.2711	30.122	88	.01	42	42	42
500	1020.3	42.0	39	50	4	7	10	30.13	1.2710	30.113	88	0.00	42	42	40
600	1020.3	42.2	39	46	6	9	9	30.13	1.2703	30.111	89	0.00	42	42	37
700	1020.3	42.6	40	37	4	8	10	30.13	1.2693	30.113	89	0.00	43	42	40
800	1020.2	42.9	40	34	4	7	9	30.13	1.2684	30.109	89	0.00	43	43	42
900	1019.6	43.8	41	48	6	10	10	30.11	1.2653	30.090	88	0.00	44	43	37
1000	1018.9	44.7	41	41	6	9	8	30.09	1.2622	30.072	87	0.00	45	44	38
1100	1018.0	45.5	42	43	6	11	9	30.06	1.2589	30.043	87	0.00	46	45	39
1200	1017.4	46.6	43	51	4	7	10	30.04	1.2553	30.025	86	.01	47	46	45
1300	1016.3	46.9	43	31	4	7	9	30.01	1.2530	29.993	87	0.00	48	46	45
1400	1014.7	47.5	44	75	5	9	11	29.96	1.2496	29.947	87	.02	48	47	45
1500	1013.1	47.8	44	81	7	11	7	29.92	1.2470	29.900	87	.03	48	47	40
1600	1012.0	47.2	44	78	4	9	14	29.88	1.2470	29.866	88	.11	47	47	45
1700	1010.2	46.9	44	12	5	9	12	29.83	1.2454	29.814	89	.10	47	47	43
1800	1008.6	47.0	44	24	7	12	8	29.78	1.2431	29.766	90	.22	48	47	39
1900	1006.3	47.5	45	35	11	16	7	29.72	1.2392	29.699	90	.12	48	47	35
2000	1003.5	47.8	45	12	11	18	14	29.63	1.2348	29.616	91	.23	48	47	35
2100	999.9	48.4	45	353	14	23	22	29.53	1.2290	29.510	90	.21	49	48	33
2200	997.4	47.9	45	353	13	25	22	29.45	1.2272	29.436	89	.07	48	48	33
2300	996.2	47.6	44	340	10	20	20	29.42	1.2264	29.401	88	.13	48	47	36
2400	996.5	47.5	44	295	14	26	12	29.43	1.2271	29.409	87	.17	48	47	32
Min	996.2	42.0	34		2	5	7	29.42	1.2264	29.401	71	0.00	42	42	32
Ave	1013.2	45.4	42	24	7	11	12	29.92	1.2532	29.902	87	.06	46	45	39
Max	1022.7	48.4	45		14	26	22	30.20	1.2722	30.182	91	.23	49	48	45
STD	8.8	2.4	3		4	6	5	.26	.0164	.260	4	.08	2	2	4
Tot												1.44			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 25 MAY 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1014.3	51.8	50	2	8	18	18	29.95	1.2376	29.936	95	0.00	53	51	43
200	1014.4	51.4	50	2	8	17	18	29.96	1.2389	29.938	95	0.00	52	51	43
300	1014.2	51.2	50	11	9	16	15	29.95	1.2390	29.931	95	.01	51	51	42
400	1014.2	51.1	50	13	9	16	14	29.95	1.2392	29.932	95	0.00	51	51	42
500	1014.4	51.1	50	15	8	15	14	29.96	1.2394	29.938	96	0.00	52	51	42
600	1014.9	51.9	50	32	9	18	15	29.97	1.2382	29.953	94	0.00	53	51	42
700	1015.6	51.0	49	25	9	16	13	29.99	1.2414	29.973	93	0.00	51	51	41
800	1016.2	50.5	49	26	9	14	14	30.01	1.2435	29.992	93	0.00	51	50	41
900	1016.4	49.7	48	29	8	14	15	30.01	1.2455	29.996	95	0.00	50	49	42
1000	1016.5	50.4	49	26	6	12	15	30.02	1.2441	30.000	95	0.00	51	50	44
1100	1016.5	51.7	50	37	5	11	16	30.02	1.2408	30.001	93	0.00	53	51	48
1200	1016.6	53.0	50	41	4	8	19	30.02	1.2375	30.002	90	0.00	54	53	53
1300	1016.5	53.6	50	24	3	7	22	30.02	1.2360	30.001	89	0.00	54	53	54
1400	1016.3	54.1	51	43	3	7	18	30.01	1.2345	29.995	89	0.00	55	54	54
1500	1016.2	55.3	52	25	3	6	18	30.01	1.2313	29.992	88	0.00	56	55	55
1600	1016.2	56.1	52	10	2	6	25	30.01	1.2294	29.991	86	0.00	56	56	56
1700	1016.4	56.0	52	11	1	4	27	30.01	1.2297	29.996	85	0.00	56	56	56
1800	1016.4	55.9	52	248	2	4	14	30.02	1.2302	29.998	86	0.00	56	56	56
1900	1016.7	55.5	52	250	1	3	12	30.02	1.2313	30.006	87	0.00	56	55	56
2000	1016.9	55.3	52	214	2	4	9	30.03	1.2319	30.013	90	0.00	55	55	55
2100	1017.3	55.2	52	206	3	5	10	30.04	1.2326	30.023	90	0.00	55	55	55
2200	1017.4	55.2	52	180	3	5	8	30.04	1.2328	30.025	90	0.00	55	55	55
2300	1017.1	55.6	52	163	5	11	12	30.04	1.2316	30.018	89	0.00	56	55	53
2400	1016.9	55.5	53	162	6	12	12	30.03	1.2315	30.013	91	0.00	56	55	51
Min	1014.2	49.7	48		1	3	8	29.95	1.2294	29.931	85	0.00	50	49	41
Ave	1016.0	53.2	51	23	5	10	16	30.00	1.2362	29.986	91	.00	54	53	49
Max	1017.4	56.1	53		9	18	27	30.04	1.2455	30.025	96	.01	56	56	56
STD	1.0	2.2	1		3	5	5	.03	.0049	.031	3	.00	2	2	6
Tot												.01			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 26 MAY 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1016.8	54.7	52	163	6	10	11	30.03	1.2333	30.008	92	0.00	55	54	50
200	1016.5	54.6	52	157	6	13	15	30.02	1.2333	30.001	91	0.00	55	54	51
300	1016.2	54.6	52	135	5	10	15	30.01	1.2328	29.990	91	0.00	55	54	52
400	1015.5	54.7	52	112	6	12	17	29.99	1.2318	29.970	92	0.00	55	54	50
500	1015.4	54.6	52	100	6	13	16	29.99	1.2319	29.967	91	0.00	55	54	49
600	1016.0	54.6	52	92	6	12	16	30.00	1.2327	29.984	91	0.00	55	54	50
700	1016.0	54.9	52	95	6	11	17	30.00	1.2318	29.984	90	0.00	55	55	51
800	1015.8	55.1	52	97	5	10	17	30.00	1.2313	29.980	90	0.00	55	55	52
900	1015.8	55.3	52	92	5	10	18	30.00	1.2307	29.979	89	0.00	56	55	52
1000	1016.2	55.3	52	59	3	7	15	30.01	1.2311	29.992	89	.01	56	55	55
1100	1016.5	54.6	52	77	4	9	15	30.02	1.2332	29.998	92	.07	55	54	53
1200	1016.3	54.4	52	89	5	10	18	30.01	1.2335	29.994	93	.07	55	54	52
1300	1016.0	54.2	52	83	4	8	15	30.00	1.2336	29.986	93	.05	55	54	52
1400	1015.4	55.0	53	90	4	9	17	29.98	1.2307	29.967	93	0.00	55	55	53
1500	1014.8	55.4	53	106	5	9	16	29.97	1.2289	29.948	92	.03	56	55	53
1600	1014.5	55.1	53	122	5	10	16	29.96	1.2293	29.941	93	.02	56	55	53
1700	1014.5	54.5	53	128	6	12	14	29.96	1.2309	29.940	93	.02	55	54	49
1800	1014.5	54.8	52	113	5	11	15	29.96	1.2302	29.939	91	0.00	55	55	51
1900	1014.5	54.6	52	112	3	7	19	29.96	1.2308	29.942	91	0.00	55	54	54
2000	1014.8	54.5	52	104	3	6	18	29.97	1.2315	29.950	90	0.00	55	54	54
2100	1014.9	54.8	52	84	4	9	15	29.97	1.2307	29.952	91	0.00	55	55	53
2200	1014.7	54.8	52	73	6	10	13	29.96	1.2305	29.947	91	0.00	55	55	50
2300	1014.4	54.5	52	64	6	10	13	29.96	1.2311	29.938	90	0.00	55	54	50
2400	1014.6	54.1	51	72	5	9	15	29.96	1.2323	29.942	89	0.00	54	54	51
Min	1014.4	54.1	51		3	6	11	29.96	1.2289	29.938	89	0.00	54	54	49
Ave	1015.4	54.7	52	102	5	10	16	29.99	1.2316	29.968	91	.01	55	54	52
Max	1016.8	55.4	53		6	13	19	30.03	1.2336	30.008	93	.07	56	55	55
STD	.8	3	0		1	2	2	.02	.0013	.023	1	.02	0	0	2
Tot												.27			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 27 MAY 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1014.2	53.7	50	64	4	9	17	29.95	1.2328	29.931	88	0.00	54	53	52
200	1014.1	53.4	50	68	3	6	20	29.95	1.2335	29.928	88	0.00	54	53	53
300	1013.8	53.3	50	94	3	6	21	29.94	1.2335	29.921	90	0.00	53	53	53
400	1013.8	53.0	50	73	3	7	16	29.94	1.2342	29.920	89	0.00	53	53	53
500	1013.9	53.0	49	64	5	10	14	29.94	1.2342	29.922	87	0.00	53	53	50
600	1014.2	53.1	50	54	3	9	15	29.95	1.2345	29.932	89	0.00	53	53	53
700	1014.8	56.8	54	13	1	6	39	29.97	1.2249	29.950	89	0.00	57	53	57
800	1014.8	58.0	55	325	1	5	36	29.97	1.2207	29.950	88	0.00	58	56	58
900	1015.2	59.4	56	255	3	6	24	29.98	1.2181	29.961	86	0.00	59	58	58
1000	1015.3	61.8	58	246	4	8	24	29.98	1.2101	29.965	84	0.00	62	58	60
1100	1014.9	62.6	56	69	3	7	37	29.97	1.2003	29.952	78	0.00	63	61	61
1200	1014.7	63.0	55	149	4	9	23	29.96	1.2015	29.946	75	0.00	63	63	60
1300	1014.1	63.5	54	137	5	8	19	29.95	1.2090	29.930	71	0.00	65	61	62
1400	1013.7	64.7	55	151	4	8	28	29.93	1.2054	29.917	71	0.00	66	64	64
1500	1013.6	66.7	53	284	4	10	31	29.93	1.2013	29.915	61	0.00	69	65	66
1600	1013.6	66.5	46	328	5	13	19	29.93	1.2029	29.914	48	0.00	67	66	64
1700	1013.8	66.7	46	308	3	8	19	29.94	1.2027	29.919	47	0.00	67	66	66
1800	1014.0	65.9	45	316	4	7	19	29.94	1.2047	29.925	47	0.00	67	65	66
1900	1014.4	64.3	45	293	4	7	14	29.96	1.2089	29.937	49	0.00	66	63	64
2000	1014.8	62.5	44	327	4	9	20	29.97	1.2137	29.950	52	0.00	63	61	62
2100	1015.4	58.7	45	294	3	8	20	29.98	1.2233	29.967	60	0.00	61	56	59
2200	1015.8	58.2	46	303	3	8	16	30.00	1.2248	29.978	63	0.00	59	56	58
2300	1016.5	57.7	46	345	5	12	18	30.02	1.2268	29.998	65	0.00	59	56	54
2400	1017.2	57.6	45	355	7	14	17	30.04	1.2280	30.019	63	0.00	58	57	52
Min	1013.6	53.0	44		1	5	14	29.93	1.2003	29.914	47	0.00	53	53	50
Ave	1015.4	59.6	51	358	4	8	22	29.96	1.2179	29.944	72	0.00	60	59	59
Max	1017.2	66.7	60		7	14	39	30.04	1.2345	30.019	90	0.00	69	66	67
STD	.8	5.5	5		1	2	7	.03	.0127	.027	16	0.00	6	5	6
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 28 MAY 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1017.6	56.2	44	338	4	10	20	30.05	1.2319	30.032	64	0.00	57	55	55
200	1017.8	49.4	43	248	2	4	3	30.06	1.2490	30.039	80	0.00	55	46	49
300	1018.1	45.5	43	253	3	5	5	30.06	1.2589	30.046	92	0.00	46	45	45
400	1018.3	45.1	43	259	2	5	8	30.07	1.2600	30.052	93	0.00	46	45	45
500	1018.7	49.0	45	297	3	7	13	30.08	1.2507	30.065	85	0.00	51	46	49
600	1019.3	52.7	46	297	4	8	16	30.10	1.2423	30.082	79	0.00	55	51	51
700	1019.8	56.2	47	298	5	10	13	30.12	1.2343	30.098	72	0.00	59	55	53
800	1020.4	60.7	48	323	4	9	19	30.13	1.2241	30.115	63	0.00	62	59	59
900	1020.8	62.9	47	358	4	9	19	30.14	1.2195	30.126	57	0.00	64	62	61
1000	1020.8	65.1	49	357	4	9	17	30.15	1.2143	30.128	56	0.00	66	64	64
1100	1021.0	67.6	48	349	4	8	20	30.15	1.2090	30.134	49	0.00	69	66	67
1200	1021.1	69.1	47	18	3	8	21	30.15	1.2058	30.137	45	0.00	70	68	69
1300	1020.9	70.2	46	4	3	7	24	30.15	1.2030	30.129	43	0.00	71	69	70
1400	1020.6	70.9	46	201	2	7	42	30.14	1.2011	30.120	41	0.00	72	70	71
1500	1020.3	69.2	46	203	6	10	15	30.13	1.2048	30.113	43	0.00	70	68	67
1600	1020.1	69.7	46	203	5	9	17	30.12	1.2032	30.105	42	0.00	70	69	68
1700	1020.1	68.2	45	199	5	8	10	30.12	1.2069	30.106	43	0.00	70	66	66
1800	1020.2	68.0	45	210	5	9	10	30.13	1.2076	30.109	43	0.00	69	67	66
1900	1020.6	65.5	45	226	4	7	8	30.14	1.2138	30.122	48	0.00	67	63	65
2000	1020.9	61.4	46	229	4	7	7	30.15	1.2235	30.131	57	0.00	63	60	61
2100	1021.4	58.3	48	218	3	5	12	30.16	1.2310	30.145	69	0.00	59	56	58
2200	1022.0	56.7	50	230	3	5	6	30.18	1.2353	30.163	77	0.00	57	56	57
2300	1022.3	55.1	49	264	3	5	5	30.19	1.2396	30.171	81	0.00	56	54	55
2400	1022.7	53.4	48	264	2	4	9	30.20	1.2444	30.183	82	0.00	55	53	53
Min	1017.6	45.1	43		2	4	3	30.05	1.2011	30.032	41	0.00	46	45	45
Ave	1020.3	60.3	46	268	4	7	14	30.13	1.2256	30.110	63	0.00	62	59	59
Max	1022.7	70.9	50		6	10	42	30.20	1.2600	30.183	93	0.00	72	70	71
STD	1.4	8.3	2		1	2	8	.04	.0189	.040	18	0.00	8	8	8
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 29 MAY 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1022.8	52.7	47	282	2	3	9	30.20	1.2463	30.186	81	0.00	53	52	53
200	1022.9	51.4	48	225	2	3	8	30.21	1.2496	30.189	89	0.00	53	49	51
300	1022.9	50.8	50	256	2	4	26	30.21	1.2509	30.190	96	0.00	52	49	51
400	1023.2	50.4	50	273	1	3	14	30.22	1.2522	30.199	98	0.00	51	50	50
500	1023.5	53.2	52	2	3	6	17	30.22	1.2451	30.207	96	0.00	56	51	53
600	1024.0	57.6	54	19	3	6	14	30.24	1.2349	30.221	88	0.00	59	57	58
700	1024.7	60.3	55	39	3	5	13	30.26	1.2290	30.242	82	0.00	61	59	60
800	1025.2	61.9	55	38	3	6	14	30.27	1.2260	30.257	78	0.00	63	61	62
900	1025.6	65.1	56	60	3	5	13	30.29	1.2188	30.269	72	0.00	67	63	65
1000	1025.8	68.8	56	72	2	4	16	30.29	1.2103	30.274	64	0.00	71	67	69
1100	1026.1	71.3	57	73	2	3	14	30.30	1.2049	30.282	60	0.00	72	70	71
1200	1025.8	73.4	54	40	2	4	17	30.29	1.2003	30.275	51	0.00	75	72	73
1300	1025.5	74.2	51	28	2	5	14	30.28	1.1987	30.264	44	0.00	75	74	74
1400	1024.8	74.2	49	50	3	5	17	30.26	1.1981	30.244	42	0.00	75	74	74
1500	1024.3	75.1	48	93	2	4	20	30.25	1.1957	30.230	39	0.00	76	74	75
1600	1023.8	74.9	48	79	3	6	18	30.23	1.1956	30.216	39	0.00	75	74	75
1700	1023.3	73.6	48	129	4	9	13	30.22	1.1981	30.201	40	0.00	74	73	73
1800	1023.3	72.3	49	137	4	8	14	30.22	1.2007	30.201	43	0.00	73	71	71
1900	1023.9	67.9	48	173	5	11	14	30.24	1.2117	30.218	49	0.00	71	66	66
2000	1024.3	63.9	51	174	4	7	10	30.25	1.2208	30.231	63	0.00	66	63	64
2100	1024.7	62.8	50	159	4	11	10	30.26	1.2240	30.241	64	0.00	65	61	62
2200	1024.8	64.1	49	144	6	12	14	30.26	1.2213	30.245	59	0.00	65	63	61
2300	1024.8	62.1	49	145	6	10	13	30.26	1.2260	30.244	61	0.00	63	61	59
2400	1024.5	60.0	48	157	4	8	11	30.25	1.2308	30.235	63	0.00	61	58	58
Min	1022.8	50.4	47		1	3	8	30.20	1.1956	30.186	39	0.00	51	49	50
Ave	1024.4	64.2	51	117	3	6	14	30.25	1.2204	30.232	65	0.00	66	63	64
Max	1026.1	75.1	57		6	12	26	30.30	1.2522	30.282	98	0.00	76	74	75
STD	1.0	8.4	3		1	3	4	.03	.0192	.029	20	0.00	8	9	8
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 30 MAY 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WND CHL F
100	1024.3	58.2	46	150	4	8	14	30.25	1.2351	30.230	63	0.00	59	58	58
200	1024.2	58.8	46	131	4	9	15	30.24	1.2336	30.226	62	0.00	59	59	57
300	1023.9	58.4	46	112	4	8	17	30.24	1.2341	30.218	65	0.00	59	58	57
400	1023.7	58.4	48	103	5	9	16	30.23	1.2335	30.212	69	0.00	59	58	56
500	1023.8	59.2	51	93	6	12	16	30.23	1.2313	30.214	73	0.00	60	59	55
600	1024.4	58.5	54	67	6	11	13	30.25	1.2330	30.233	85	0.00	59	58	54
700	1024.7	58.7	56	67	6	10	14	30.26	1.2328	30.242	90	0.00	60	58	55
800	1024.7	59.8	56	78	7	11	13	30.26	1.2301	30.243	88	0.00	60	59	55
900	1024.9	60.9	54	90	7	13	15	30.27	1.2280	30.248	78	0.00	61	60	56
1000	1025.2	60.1	53	109	6	15	18	30.27	1.2305	30.255	76	0.00	61	59	56
1100	1025.1	58.8	52	94	6	13	15	30.27	1.2337	30.255	78	.02	59	58	54
1200	1024.8	57.9	54	81	7	14	15	30.26	1.2351	30.244	87	.01	58	58	52
1300	1024.3	58.0	56	70	8	14	12	30.25	1.2339	30.230	93	.02	59	57	52
1400	1023.3	59.1	58	61	10	17	11	30.22	1.2296	30.201	97	.06	60	58	51
1500	1022.3	60.6	60	71	10	17	13	30.19	1.2244	30.171	97	.06	62	60	52
1600	1021.7	62.5	62	91	9	17	14	30.17	1.2189	30.154	97	.25	63	62	55
1700	1021.0	62.9	62	94	10	18	14	30.15	1.2169	30.133	97	.12	63	63	55
1800	1020.7	63.2	62	104	8	19	15	30.14	1.2159	30.124	97	.04	63	63	57
1900	1020.4	63.5	63	105	9	19	14	30.13	1.2148	30.116	97	.06	64	63	57
2000	1020.1	63.9	63	122	10	19	12	30.12	1.2133	30.106	97	.04	64	64	56
2100	1019.9	64.5	64	133	9	17	12	30.12	1.2116	30.100	97	.01	65	64	58
2200	1019.6	64.5	63	135	9	18	13	30.11	1.2114	30.092	96	0.00	65	64	58
2300	1019.1	64.4	63	133	9	17	12	30.09	1.2110	30.077	96	0.00	65	64	58
2400	1018.5	64.6	63	136	8	16	13	30.08	1.2098	30.059	96	.02	65	64	59
Min	1018.5	57.9	46		4	8	11	30.08	1.2098	30.059	62	0.00	58	57	51
Ave	1022.7	60.8	56	100	7	14	14	30.20	1.2251	30.182	86	.03	61	60	56
Max	1025.2	64.6	64		10	19	18	30.27	1.2351	30.255	97	.25	65	64	59
STD	2.2	2.5	6		2	4	2	.06	.0095	.065	13	.06	2	3	2
Tot												.71			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 15 JUN 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1012.2	70.2	67	214	4	6	9	29.89	1.1884	29.872	91	0.00	71	69	
200	1011.8	69.0	67	201	3	6	5	29.88	1.1908	29.861	94	0.00	69	69	
300	1011.8	69.2	68	195	3	5	7	29.88	1.1903	29.863	94	0.00	70	68	
400	1012.1	69.2	68	245	2	4	8	29.89	1.1907	29.870	95	0.00	70	68	
500	1012.4	67.5	66	276	2	3	9	29.90	1.1952	29.880	96	0.00	69	67	
600	1012.9	68.0	67	293	2	7	14	29.91	1.1944	29.893	95	0.00	71	66	
700	1013.3	73.2	70	343	2	6	18	29.92	1.1824	29.907	90	0.00	75	71	
800	1013.6	76.3	72	309	3	6	12	29.93	1.1756	29.914	85	0.00	77	75	
900	1013.9	77.3	72	354	5	12	18	29.94	1.1736	29.924	83	0.00	78	77	
1000	1014.4	79.3	71	12	6	10	13	29.96	1.1700	29.938	75	.11	81	78	
1100	1014.8	82.1	69	15	4	8	12	29.97	1.1651	29.950	65	0.00	83	81	
1200	1014.7	83.9	67	11	4	7	11	29.97	1.1615	29.948	58	0.00	84	83	
1300	1014.4	84.6	68	8	4	8	14	29.96	1.1596	29.937	57	0.00	85	84	
1400	1014.2	85.6	68	359	4	9	15	29.95	1.1572	29.931	55	0.00	87	85	
1500	1014.3	86.6	66	349	4	9	17	29.95	1.1556	29.934	51	0.00	87	86	
1600	1014.4	86.6	64	357	4	7	17	29.96	1.1562	29.939	48	0.00	87	86	
1700	1014.5	85.5	64	360	4	8	16	29.96	1.1586	29.939	49	0.00	86	85	
1800	1014.9	83.6	65	18	5	9	12	29.97	1.1629	29.954	54	0.00	85	83	
1900	1015.4	81.8	64	25	5	10	12	29.99	1.1676	29.969	55	0.00	83	80	
2000	1016.1	79.3	62	20	6	11	15	30.01	1.1742	29.987	55	0.00	80	78	
2100	1017.3	75.2	68	123	6	10	11	30.04	1.1832	30.022	78	0.00	78	74	
2200	1018.3	72.9	67	134	4	8	13	30.07	1.1898	30.053	80	0.00	74	73	
2300	1019.0	72.7	66	96	3	5	19	30.09	1.1912	30.072	79	0.00	73	73	
2400	1019.4	71.7	64	133	3	7	20	30.10	1.1945	30.085	77	0.00	73	70	
Min	1011.8	67.5	62		2	3	5	29.88	1.1556	29.861	48	0.00	69	66	
Ave	1014.6	77.1	67	11	4	8	13	29.96	1.1762	29.943	73	.00	78	76	
Max	1019.4	86.6	72		6	12	20	30.10	1.1952	30.085	96	.11	87	86	
STD	2.1	6.7	2		1	2	4	.06	.0143	.063	17	.02	7	7	
Tot												.11			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 16 JUN 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1019.8	71.1	65	108	4	8	14	30.12	1.1960	30.098	82	0.00	72	71	
200	1020.1	70.3	66	101	5	11	15	30.12	1.1980	30.106	85	0.00	71	70	
300	1020.2	69.5	65	82	7	14	15	30.13	1.2001	30.110	86	0.00	70	69	
400	1020.9	68.0	64	78	8	15	14	30.15	1.2045	30.129	88	0.00	69	67	
500	1021.6	66.9	64	78	8	14	14	30.17	1.2080	30.151	90	0.00	67	66	
600	1022.3	66.5	63	80	8	15	13	30.19	1.2101	30.171	88	0.00	67	66	
700	1022.9	67.5	63	77	8	15	14	30.21	1.2084	30.189	87	0.00	68	67	
800	1023.6	68.9	64	87	7	12	15	30.23	1.2059	30.208	83	0.00	70	68	
900	1024.2	70.9	64	89	5	10	17	30.25	1.2021	30.227	78	0.00	72	70	
1000	1024.4	73.3	64	105	5	10	17	30.25	1.1970	30.233	72	0.00	74	72	
1100	1024.5	75.3	63	117	5	11	16	30.25	1.1925	30.235	66	0.00	76	74	
1200	1024.4	76.8	63	122	6	11	15	30.25	1.1892	30.233	63	0.00	78	76	
1300	1024.4	77.5	63	125	6	12	14	30.25	1.1877	30.233	60	0.00	78	77	
1400	1024.2	77.4	61	131	6	11	16	30.25	1.1880	30.227	58	0.00	78	77	
1500	1024.0	77.3	61	126	6	12	15	30.24	1.1879	30.220	58	0.00	78	77	
1600	1023.7	76.7	61	141	5	11	16	30.23	1.1892	30.213	58	0.00	77	76	
1700	1023.6	77.1	61	151	5	10	17	30.23	1.1881	30.208	57	0.00	78	76	
1800	1023.6	76.4	61	154	5	10	14	30.23	1.1897	30.209	59	0.00	77	76	
1900	1023.5	74.6	62	126	7	12	12	30.23	1.1934	30.207	64	0.00	76	73	
2000	1023.5	72.3	63	129	7	13	12	30.22	1.1983	30.205	71	0.00	73	71	
2100	1023.9	70.3	61	159	7	12	10	30.24	1.2036	30.219	73	0.00	71	69	
2200	1024.3	68.1	59	171	6	12	9	30.25	1.2096	30.230	73	0.00	69	67	
2300	1024.3	66.3	59	180	6	11	9	30.25	1.2140	30.231	76	0.00	67	66	
2400	1024.4	65.3	59	192	6	11	8	30.25	1.2162	30.233	80	0.00	66	65	
Min	1019.8	65.3	59		4	8	8	30.12	1.1877	30.098	57	0.00	66	65	
Ave	1023.2	71.9	62	118	6	12	14	30.21	1.1991	30.197	73	0.00	73	71	
Max	1024.5	77.5	66		8	15	17	30.25	1.2162	30.235	90	0.00	78	77	
STD	1.5	4.2	2		1	2	3	.04	.0091	.045	12	0.00	4	4	
Tot												0.00			

APG Surface Observation Summary Edited Data Report for EDT

Elevation(ft): 16
Latitude : 39.50
Longitude : 76.07

17 JUN 1992 Spesutie Island

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1024.4	64.1	59	183	5	9	7	30.25	1.2189	30.232	83	0.00	65	64	
200	1024.1	63.6	59	177	5	7	8	30.24	1.2197	30.224	84	0.00	64	63	
300	1024.4	64.6	60	181	5	8	7	30.25	1.2177	30.233	85	0.00	65	64	
400	1024.4	64.2	60	188	5	9	7	30.25	1.2185	30.232	85	0.00	65	63	
500	1024.7	62.2	59	194	4	5	5	30.26	1.2240	30.241	88	0.00	63	62	
600	1025.0	63.4	60	188	4	[illegible]	6	30.27	1.2211	30.252	88	0.00	65	61	
700	1025.5	67.9	63	192	5	8	9	30.28	1.2106	30.266	84	0.00	69	66	
800	1026.0	70.4	64	182	5	8	13	30.30	1.2053	30.279	80	0.00	72	69	
900	1026.6	72.0	65	199	5	9	14	30.31	1.2021	30.297	77	0.00	73	71	
1000	1026.4	73.4	63	202	6	12	15	30.31	1.1991	30.293	71	0.00	74	73	
1100	1026.2	75.2	65	214	5	10	21	30.30	1.1946	30.287	71	0.00	77	74	
1200	1026.0	76.8	66	212	5	9	19	30.30	1.1905	30.280	69	0.00	78	76	
1300	1025.4	78.1	66	195	5	9	19	30.28	1.1867	30.262	66	0.00	80	77	
1400	1025.0	80.1	64	217	5	8	19	30.27	1.1824	30.249	57	0.00	81	79	
1500	1024.3	80.5	63	212	5	9	17	30.25	1.1809	30.229	55	0.00	81	80	
1600	1023.8	80.9	64	215	5	9	17	30.23	1.1794	30.215	56	0.00	81	81	
1700	1023.2	79.7	63	207	7	11	13	30.21	1.1813	30.196	57	0.00	81	78	
1800	1022.8	77.3	63	218	7	12	10	30.20	1.1864	30.186	61	0.00	78	76	
1900	1022.7	75.1	63	207	7	12	10	30.20	1.1910	30.183	66	0.00	76	74	
2000	1022.6	71.9	61	188	7	12	8	30.20	1.1985	30.179	69	0.00	74	70	
2100	1023.2	69.2	60	188	7	12	8	30.21	1.2056	30.197	72	0.00	70	68	
2200	1023.7	67.0	59	176	6	12	8	30.23	1.2115	30.213	74	0.00	68	67	
2300	1023.8	66.3	56	166	8	14	9	30.23	1.2140	30.216	69	0.00	67	66	
2400	1023.2	64.3	54	164	8	14	9	30.22	1.2180	30.198	70	0.00	66	63	
Min	1022.6	62.2	54		4	5	5	30.20	1.1794	30.179	55	0.00	63	61	
Ave	1024.5	71.2	61	193	6	10	12	30.25	1.2024	30.235	72	0.00	72	70	
Max	1026.6	80.9	66		8	14	21	30.31	1.2240	30.297	88	0.00	81	81	
STD	1.2	6.4	3		1	2	5	.04	.0149	.036	11	0.00	6	6	
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 18 JUN 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1022.8	61.8	55	180	7	13	8	30.20	1.2234	30.186	78	0.00	63	61	
200	1022.7	60.9	56	184	6	11	8	30.20	1.2250	30.182	84	0.00	61	61	
300	1022.5	60.7	57	187	4	8	8	30.19	1.2250	30.176	89	0.00	61	60	
400	1022.1	61.4	59	190	5	10	9	30.18	1.2225	30.165	94	0.00	62	61	
500	1021.8	61.9	61	185	5	8	8	30.17	1.2206	30.156	95	0.00	63	62	
600	1021.4	64.0	63	190	5	8	10	30.16	1.2149	30.145	95	0.00	66	63	
700	1021.1	66.7	65	180	7	11	10	30.15	1.2079	30.137	93	0.00	68	66	
800	1020.9	69.6	66	178	8	14	11	30.15	1.2004	30.131	90	0.00	72	68	
900	1020.6	73.1	67	194	10	18	12	30.14	1.1920	30.121	81	0.00	75	72	
1000	1020.6	75.9	66	194	11	19	12	30.14	1.1860	30.121	71	0.00	77	75	
1100	1020.4	77.2	66	188	11	17	11	30.13	1.1830	30.116	68	0.00	78	77	
1200	1019.9	78.9	66	181	10	16	11	30.12	1.1786	30.101	65	0.00	80	78	
1300	1019.1	80.6	66	173	10	18	13	30.09	1.1741	30.077	61	0.00	81	80	
1400	1018.2	81.0	66	188	10	18	16	30.07	1.1721	30.049	60	0.00	82	80	
1500	1017.6	80.2	65	195	10	15	11	30.05	1.1732	30.032	61	0.00	81	80	
1600	1017.0	79.9	65	199	10	16	10	30.03	1.1732	30.015	61	0.00	81	79	
1700	1016.4	78.3	64	202	8	13	10	30.01	1.1765	29.997	61	0.00	79	77	
1800	1015.8	77.1	63	190	8	13	8	30.00	1.1785	29.979	62	0.00	77	76	
1900	1015.5	75.7	61	176	7	12	9	29.99	1.1819	29.971	59	0.00	76	75	
2000	1015.0	74.5	59	179	7	14	9	29.97	1.1842	29.956	59	0.00	75	74	
2100	1014.7	73.6	60	182	8	13	9	29.96	1.1857	29.947	63	0.00	74	73	
2200	1014.4	72.8	61	181	8	14	9	29.96	1.1866	29.937	67	0.00	73	73	
2300	1013.7	72.1	62	179	9	15	9	29.93	1.1874	29.917	71	0.00	73	72	
2400	1013.2	70.7	62	172	8	14	9	29.92	1.1899	29.903	74	0.00	71	70	
Min	1013.2	60.7	55		4	8	8	29.92	1.1721	29.903	59	0.00	61	60	
Ave	1018.6	72.0	63	185	8	14	10	30.08	1.1934	30.063	74	0.00	73	71	
Max	1022.8	81.0	67		11	19	16	30.20	1.2250	30.186	95	0.00	82	80	
STD	3.2	7.0	3		2	3	2	.09	.0188	.093	13	0.00	7	7	
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 19 JUN 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1012.5	69.9	63	174	7	13	9	29.90	1.1908	29.883	78	0.00	70	69	
200	1012.0	67.8	65	174	6	11	4	29.89	1.1943	29.868	90	.01	69	67	
300	1011.2	67.8	66	163	7	14	12	29.86	1.1931	29.843	93	.01	68	68	
400	1010.8	67.6	66	179	6	11	10	29.85	1.1931	29.831	96	.60	68	67	
500	1010.1	68.4	68	157	7	13	11	29.83	1.1900	29.812	99	.08	69	67	
600	1009.9	70.0	70	172	7	12	10	29.82	1.1856	29.806	99	.01	71	69	
700	1009.5	71.5	71	179	7	12	10	29.81	1.1814	29.794	98	0.00	72	71	
800	1009.3	71.8	71	185	8	14	9	29.81	1.1807	29.788	96	0.00	73	71	
900	1009.0	73.8	72	189	9	16	10	29.80	1.1755	29.780	93	0.00	74	74	
1000	1008.8	74.2	72	189	8	14	10	29.79	1.1744	29.773	93	0.00	75	74	
1100	1008.6	74.5	72	193	9	15	9	29.78	1.1735	29.766	92	0.00	75	74	
1200	1008.1	75.1	73	193	8	14	9	29.77	1.1713	29.752	92	0.00	76	75	
1300	1007.3	75.3	73	193	10	15	9	29.75	1.1701	29.730	91	0.00	76	75	
1400	1006.9	77.6	74	201	10	16	10	29.74	1.1643	29.718	88	0.00	78	76	
1500	1006.5	79.3	75	202	9	14	11	29.72	1.1599	29.705	86	0.00	80	78	
1600	1006.2	79.9	75	206	8	13	10	29.72	1.1582	29.697	84	0.00	80	78	
1700	1006.0	76.6	72	236	5	10	15	29.71	1.1657	29.689	86	0.00	78	74	
1800	1004.8	74.4	71	208	3	6	16	29.67	1.1698	29.656	88	0.00	75	74	
1900	1005.2	74.5	71	348	3	7	19	29.69	1.1698	29.668	89	0.00	76	73	
2000	1005.7	73.0	70	23	3	6	15	29.70	1.1738	29.682	91	0.00	74	73	
2100	1005.9	72.8	70	39	3	6	16	29.70	1.1745	29.686	91	0.00	73	73	
2200	1005.8	72.0	70	51	2	5	35	29.70	1.1762	29.685	94	.17	73	71	
2300	1005.4	70.4	69	285	1	4	20	29.69	1.1796	29.674	96	0.00	71	70	
2400	1005.2	70.3	69	313	1	4	26	29.68	1.1796	29.667	97	0.00	71	70	
Min	1004.8	67.6	63		1	4	9	29.67	1.1582	29.656	78	0.00	68	67	
Ave	1008.0	72.9	70	188	6	11	13	29.77	1.1769	29.748	92	.04	74	72	
Max	1012.5	79.9	75		10	16	35	29.90	1.1943	29.883	99	.60	80	78	
STD	2.3	3.5	3		3	4	6	.07	.0103	.069	5	.13	4	3	
Tot												.88			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 18
Latitude : 39.50 20 JUN 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Ave WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WB Tm Id F
100	1005.1	70.8	70	298	3	9	17	29.68	1.1782	29.664	96	0.00	71	70	
200	1004.9	70.5	69	314	4	[illegible]	20	29.68	1.1789	29.657	94	0.00	71	70	
300	1004.9	70.1	68	337	3	8	20	29.67	1.1799	29.657	95	0.00	71	70	
400	1005.3	70.2	68	314	4	8	16	29.69	1.1800	29.669	94	0.00	71	70	
500	1005.7	69.3	67	311	5	10	18	29.70	1.1829	29.682	94	0.00	70	69	
600	1005.6	68.7	67	332	5	10	20	29.70	1.1844	29.678	93	0.00	69	69	
700	1006.2	69.3	67	323	7	15	20	29.71	1.1836	29.695	91	0.00	70	69	
800	1006.7	69.4	66	334	6	13	21	29.73	1.1842	29.711	88	0.00	70	69	
900	1007.0	71.7	66	355	6	13	17	29.74	1.1795	29.720	82	0.00	73	70	
1000	1007.4	72.8	65	348	5	12	14	29.75	1.1776	29.732	77	0.00	74	70	
1100	1008.1	71.9	65	328	5	11	14	29.77	1.1806	29.753	78	0.00	72	[illegible]	
1200	1008.6	72.6	65	310	5	13	14	29.78	1.1796	29.767	77	0.00	73	[illegible]	
1300	1008.3	76.1	67	320	4	9	21	29.78	1.1711	29.758	74	0.00	77	[illegible]	
1400	1007.7	77.4	67	309	5	12	19	29.76	1.1675	29.739	69	0.00	78	[illegible]	
1500	1007.4	78.2	66	301	5	11	17	29.75	1.1655	29.732	67	0.00	79	[illegible]	
1600	1007.2	78.0	65	302	6	12	17	29.74	1.1661	29.722	64	0.00	78	[illegible]	
1700	1007.3	76.6	64	308	6	12	20	29.75	1.1696	29.730	64	0.00	78	[illegible]	
1800	1007.9	74.9	62	323	6	14	20	29.76	1.1742	29.745	65	0.00	76	[illegible]	
1900	1008.7	72.1	61	337	7	15	20	29.79	1.1819	29.769	67	0.00	74	[illegible]	
2000	1009.3	67.7	58	338	8	17	19	29.81	1.1929	29.788	71	0.00	69	66	
2100	1010.0	65.0	56	332	8	17	19	29.82	1.2002	29.807	72	0.00	66	64	
2200	1010.4	64.0	55	334	7	16	20	29.84	1.2032	29.821	72	0.00	65	64	
2300	1010.8	63.1	55	330	6	12	21	29.85	1.2059	29.832	74	0.00	64	63	
2400	1011.3	62.3	54	311	6	13	17	29.86	1.2084	29.845	76	0.00	63	62	
Min	1004.9	62.3	54		3	8	16	29.67	1.1655	29.657	64	0.00	63	62	
Ave	1007.6	71.0	64	325	5	12	19	29.75	1.1823	29.737	79	0.00	72	70	
Max	1011.3	78.2	70		8	17	21	29.86	1.2084	29.845	96	0.00	79	78	
STD	1.9	4.5	5		1	3	2	.06	.0120	.055	11	0.00	5	4	
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39 58 21 JUNE 1992 Spesutie Island
Longitude : 76 32

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt. F	Rue W deg	Ru Wnd Spd Kt	Pk Wnd Spd Kt	STD Wnd Dir deg	Altim -eter in Hg	Density kg/m3	Sta. Press. in Hg	RH %	Precip in	Max Tmp F	Min Tmp F	MRG Tmp Id. F
100	1018.8	61.2	55	325	6	12	20	29.85	1.2091	29.838	77	0.000	67	61	
200	1018.6	61.0	54	330	5	12	20	29.84	1.2106	29.826	78	0.000	61	61	
300	1018.6	60.6	54	317	5	11	19	29.84	1.2112	29.825	78	0.000	61	61	
400	1018.6	59.9	53	317	5	10	18	29.84	1.2133	29.824	79	0.00	60	59	
500	1018.2	59.2	54	316	5	11	21	29.85	1.2150	29.822	82	0.000	59	59	
600	1017.5	59.3	54	302	6	11	15	29.82	1.2158	29.852	82	0.00	60	59	
700	1017.3	59.0	54	311	6	12	20	29.84	1.2125	29.826	82	0.00	59	59	
800	1017.5	60.9	55	303	6	12	22	29.90	1.2129	29.888	81	0.000	60	59	
900	1017.6	63.1	56	312	5	11	20	29.90	1.2028	29.885	78	0.00	64	60	
1000	1017.9	66.3	52	308	5	10	24	29.91	1.2008	29.893	71	0.000	68	64	
1100	1017.7	68.5	57	302	6	12	17	29.91	1.1953	29.886	67	0.00	70	69	
1200	1017.4	70.2	57	314	5	14	21	29.90	1.1910	29.872	64	0.00	71	68	
1300	1017.0	69.8	56	311	6	14	19	29.88	1.1912	29.862	6	0.00	71	69	
1400	1016.9	71.4	57	282	8	16	19	29.88	1.1829	29.863	63	0.00	73	69	
1500	1016.8	70.5	55	295	8	18	17	29.88	1.1902	29.862	59	0.00	71	70	
1600	1017.0	68.6	54	304	8	17	21	29.89	1.1948	29.868	63	0.00	70	68	
1700	1017.5	67.0	53	314	9	19	18	29.90	1.1993	29.881	67	0.00	68	67	
1800	1018.1	64.9	51	310	9	18	18	29.92	1.2065	29.900	68	0.00	65	64	
1900	1018.8	62.2	49	318	10	21	17	29.94	1.2125	29.920	67	0.00	64	61	
2000	1019.0	60.0	47	299	7	15	16	29.94	1.2182	29.926	67	0.00	61	59	
2100	1019.4	58.0	46	282	6	13	16	29.96	1.2235	29.938	69	0.00	59	57	
2200	1019.6	55.3	45	301	5	9	9	29.96	1.2283	29.944	80	0.00	57	54	
2300	1019.5	54.0	45	258	5	9	9	29.96	1.2284	29.944	82	0.00	56	53	
2400	1019.5	53.9	46	228	6	12	11	29.96	1.2284	29.939	78	0.00	55	53	
Min	1018.6	53.9	45		5	9	9	29.84	1.1829	29.824	59	0.00	56	53	
Ave	1018.5	62.2	52	305	6	13	18	29.90	1.2083	29.881	72	0.00	66	62	
Max	1019.6	71.4	57		10	21	24	29.96	1.2284	29.943	82	0.00	73	70	
STD	1.3	5.1	4		1	3	4	.04	.0134	.039	8	0.00	5	5	
Tot												0.00			

SISSUTIE ISLAND OBSERVATION SITE

Times listed are real time - no corrections are necessary

DATE	TIME	SKY CONDITION (x 100 = Height in feet)	VISIBILITY (Miles)	TOTAL SKY COVER 1/10's	TOTAL OPAQUE
15 June'92	0800	O	7	0	0
	0900	O	6H	0	0
	1000	O	6H	0	0
	1100	O	7	0	0
	1200	O	7	0	0
	1300	270 -◑	7	3	1
	1400	270 -◑	7	1	0
	1500	270 -◑	8	3	1
	1600	270 -◑	8	6	2
16 June'92	0800	250 -◑	9	6	0
	0900	250 -◑	9	6	0
	1000	250 -◑	10	6	3
	1100	250 -◑	10	6	3
	1200	30◑ 250◑	10	5	3
	1300	30◑ 70◑ E250◑	10	7	5
	1400	30◑ E70◑	10	7	7
	1500	30◑ E70◑ 200◑	9	9	7
	1600	30◑ 70◑ E200◑	10	7	7
17 June'92	0800	1200 250 -◑	10	4	2
	0900	250 -◑	10	3	0
	1000	250 -◑	10	2	0
	1100	250 -◑	10	2	0
	1200	250 -◑	10	2	0
	1300	30◑ 250 -◑	10	3	1
	1400	30◑ 250 -◑	10	4	2
	1500	30◑ E200 BKN	10	7	4
	1600	30◑ E200 BKN	10	7	4
18 June'92	0800	O	10	0	0
	0900	30◑	10	2	2
	1000	30◑	10	2	2
	1100	30◑	10	2	2
	1200	40◑	10	4	4
	1300	40◑	10	2	2
	1400	40◑ E180◑	10	6	6
	1500	40◑ E180◑	10	6	6
	1600	E180◑	10	7	7
19 June'92	0800	E50◑ 140⊕	6 RW-F	10	10
	0900	70 E50◑	6 F	9	9
	1000	E100◑ 300⊕	6 F	10	10
	1100	E100◑ 300⊕	7	10	10
	1200	E300⊕	7	10	10
	1300	E300⊕	7	10	10
	1400	E300⊕	7	10	10
	1500	E300⊕	7	10	10
	1600	E300⊕	7	10	10

KEY

GF= Ground Fog
F= Fog
H= Haze
K= Smoke
BS= Blowing Snow
BN= Blowing Sand
BD= Blowing Dust
IF= Ice Fog
D= Dust
BY= Blowing Spray

****

T= Thunderstorm
T+= Severe Thunderstorm
R= Rain
RW= Rainshower
L= Drizzle
ZR= Freezing Rain
ZL= Freezing Drizzle
IP= Ice Pellets (Sleet)
IPW=Ice Pellet Shower
S= Snow
SW= Snow Shower
SP= Snow Pellets
SG= Snow Grains
IC= Ice Crystals
A= Hail

****

Intensity of precip.:
- = Light
+ = Heavy
No symbol = Moderate

****

Sky Condition:
◯ = Clear = less than 1/10
◑ = Scattered = 1/10-5/10
◍ = Broken = 6/10-9/10
⊕ = Overcast = 10/10 of sky is covered.

NOTE: A layer of clouds is considered to be thin if ½ or more of it is transparent; the sky condition symbol will be preceded by a (-) in such cases.
Visibilities of 7 or more miles are classified as unrestricted.
(- X) - sky partially obscured by surface based phenomena
(W 2 X) - sky completely obscured; vertical visibility is 200 feet

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 6 JUL 1992 Spesutie Island
Longitude : 76.17

Time hhmm	Sea lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Id> F
100	1008.8	74.4	72	225	8	15	11	29.79	1.1738	29.773	93	.01	75	73	
200	1007.8	72.5	70	224	7	13	11	29.76	1.1725	29.744	93	.01	74	72	
300	1007.8	72.1	70	295	3	7	22	29.76	1.1785	29.742	93	0.00	72	71	
400	1008.2	70.7	69	207	4	7	12	29.77	1.1822	29.754	95	0.00	71	70	
500	1008.4	71.0	69	242	4	8	10	29.78	1.1818	29.762	94	0.00	71	71	
600	1009.1	70.4	69	255	2	6	10	29.80	1.1841	29.782	94	0.00	71	70	
700	1009.6	71.1	69	236	2	4	11	29.81	1.1830	29.792	93	0.00	71	71	
800	1010.3	71.7	70	259	3	7	12	29.83	1.1823	29.817	93	0.00	73	71	
900	1010.8	72.7	70	345	5	11	19	29.85	1.1808	29.832	90	0.00	73	72	
1000	1010.8	72.4	68	14	6	11	14	29.85	1.1819	29.833	86	0.00	73	72	
1100	1011.5	71.8	67	5	5	9	17	29.87	1.1842	29.853	85	0.00	72	71	
1200	1011.4	71.6	68	28	4	8	18	29.87	1.1844	29.848	88	0.00	72	71	
1300	1010.9	73.5	68	35	3	7	18	29.85	1.1796	29.836	83	0.00	76	72	
1400	1010.8	76.2	68	24	3	6	12	29.85	1.1735	29.832	76	0.00	77	75	
1500	1011.0	77.9	66	67	3	4	14	29.86	1.1704	29.838	67	0.00	79	77	
1600	1011.0	79.0	66	91	3	5	14	29.86	1.1682	29.838	64	0.00	80	78	
1700	1010.8	80.0	67	102	2	4	15	29.85	1.1656	29.833	64	0.00	80	80	
1800	1010.2	78.8	68	161	2	5	15	29.85	1.1681	29.829	66	0.00	80	78	
1900	1010.9	76.0	68	201	2	3	8	29.85	1.1741	29.835	77	0.00	78	74	
2000	1011.3	72.3	67	196	2	3	9	29.86	1.1829	29.842	83	0.00	74	71	
2100	1012.1	69.0	65	240	1	3	18	29.89	1.1915	29.869	89	0.00	71	68	
2200	1012.5	68.4	66	262	1	3	5	29.90	1.1933	29.882	93	0.00	69	67	
2300	1012.8	71.2	68	280	3	8	13	29.91	1.1868	29.891	90	0.00	72	69	
2400	1013.2	71.4	67	264	4	8	16	29.92	1.1870	29.901	86	0.00	72	71	
Min	1007.8	68.4	65		1	3	5	29.76	1.1656	29.742	64	0.00	69	67	
Ave	1010.5	73.2	68	269	3	7	14	29.84	1.1798	29.824	85	.00	74	72	
Max	1013.2	80.0	72		8	15	22	29.92	1.1933	29.901	95	.01	80	80	
STD	1.5	3.2	2		2	3	4	.04	.0022	.045	10	.00	3	3	
Tot												.02			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 7 JUL 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1013.4	71.3	67	305	5	10	14	29.93	1.1877	29.908	85	0.00	72	71	
200	1013.6	71.1	65	321	6	12	20	29.93	1.1889	29.914	80	0.00	71	71	
300	1013.8	70.8	64	349	6	11	17	29.94	1.1901	29.921	78	0.00	71	71	
400	1014.2	69.7	63	356	6	11	17	29.95	1.1931	29.933	80	0.00	71	69	
500	1015.2	68.7	62	14	7	12	14	29.98	1.1969	29.960	78	0.00	69	68	
600	1015.7	68.6	61	15	7	14	14	29.99	1.1980	29.977	75	0.00	69	68	
700	1016.7	69.3	61	6	7	13	15	30.02	1.1974	30.004	74	0.00	70	69	
800	1017.2	70.5	61	16	7	13	13	30.04	1.1953	30.021	72	0.00	71	70	
900	1017.7	72.1	62	20	6	12	14	30.05	1.1923	30.035	70	0.00	73	71	
1000	1017.8	73.8	62	23	4	8	16	30.05	1.1883	30.037	67	0.00	75	73	
1100	1018.3	76.6	63	68	2	5	19	30.07	1.1825	30.052	63	0.00	78	75	
1200	1018.4	78.4	62	22	2	5	21	30.07	1.1788	30.056	58	0.00	80	77	
1300	1018.3	79.8	62	332	4	8	24	30.07	1.1758	30.053	55	0.00	81	79	
1400	1018.1	80.3	62	358	3	7	26	30.07	1.1745	30.048	53	0.00	82	79	
1500	1018.0	80.0	61	330	3	7	27	30.06	1.1752	30.045	52	0.00	81	79	
1600	1018.0	79.8	60	343	4	10	20	30.06	1.1758	30.044	50	0.00	82	79	
1700	1018.1	80.4	59	341	5	10	21	30.06	1.1748	30.046	48	0.00	81	80	
1800	1018.2	80.3	58	301	5	10	13	30.07	1.1755	30.049	46	0.00	81	80	
1900	1018.4	79.5	57	322	3	7	20	30.07	1.1775	30.055	46	0.00	80	78	
2000	1018.6	75.2	57	300	2	4	18	30.08	1.1872	30.060	53	0.00	79	78	
2100	1019.2	66.5	61	247	2	3	5	30.10	1.2067	30.079	83	0.00	78	65	
2200	1019.6	66.6	64	246	2	3	6	30.11	1.2065	30.092	90	0.00	68	65	
2300	1019.9	65.7	62	271	1	3	12	30.12	1.2093	30.099	87	0.00	67	65	
2400	1019.9	64.5	62	265	2	4	17	30.12	1.2121	30.099	90	0.00	67	67	
Min	1013.4	64.5	57		1	3	5	29.93	1.1745	29.908	46	0.00	67	67	
Ave	1017.3	73.3	61	349	4	9	17	30.04	1.1892	30.024	68	0.00	74	72	
Max	1019.9	80.4	67		7	14	27	30.12	1.2121	30.099	90	0.00	82	80	
STD	2.0	5.4	2		2	4	5	.06	.0119	.058	15	0.00	5	6	
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 8 JUL 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1019.9	67.3	63	331	1	5	19	30.12	1.2053	30.099	85	0.00	69	65	
200	1019.6	69.8	64	4	2	5	17	30.11	1.1990	30.092	83	0.00	70	69	
300	1019.6	65.9	63	301	1	4	9	30.11	1.2083	30.091	89	0.00	70	63	
400	1019.5	65.0	64	329	1	3	23	30.11	1.2101	30.089	95	0.00	66	63	
500	1020.1	62.8	61	247	2	3	11	30.12	1.2164	30.106	94	0.00	65	62	
600	1020.0	65.7	63	32	1	4	9	30.12	1.2092	30.103	92	0.00	72	62	
700	1020.5	74.0	68	13	2	3	25	30.14	1.1896	30.119	82	0.00	75	72	
800	1021.1	75.1	68	63	2	4	19	30.15	1.1878	30.134	78	0.00	76	74	
900	1020.9	75.4	67	196	6	9	14	30.15	1.1872	30.130	76	0.00	77	74	
1000	1020.8	78.0	68	202	6	10	14	30.14	1.1811	30.125	71	0.00	80	76	
1100	1020.4	79.7	62	216	8	12	11	30.13	1.1784	30.116	55	0.00	81	79	
1200	1019.8	80.8	62	214	8	14	13	30.12	1.1753	30.098	53	0.00	82	80	
1300	1019.3	82.2	61	208	7	13	12	30.10	1.1719	30.081	50	0.00	83	81	
1400	1018.4	83.2	61	208	8	13	13	30.07	1.1687	30.056	48	0.00	84	82	
1500	1018.0	82.8	61	220	9	14	10	30.06	1.1690	30.044	49	0.00	84	82	
1600	1017.2	81.3	63	206	9	17	8	30.04	1.1711	30.021	54	0.00	82	80	
1700	1016.2	80.1	63	197	10	16	8	30.01	1.1725	29.991	57	0.00	81	80	
1800	1015.7	79.3	63	188	9	16	8	29.99	1.1735	29.975	57	0.00	80	79	
1900	1016.1	78.3	63	196	9	16	10	30.01	1.1762	29.988	59	0.00	79	77	
2000	1014.8	75.5	65	170	8	13	10	29.97	1.1805	29.950	71	0.00	76	75	
2100	1015.0	74.6	67	182	8	15	9	29.97	1.1821	29.955	77	0.00	75	74	
2200	1014.6	74.0	69	176	9	16	9	29.96	1.1824	29.944	85	0.00	74	74	
2300	1013.2	74.1	70	174	9	15	8	29.92	1.1805	29.903	86	0.00	74	74	
2400	1011.9	74.6	71	185	9	16	9	29.88	1.1775	29.863	87	0.00	76	74	
Min	1011.9	62.8	61		1	3	8	29.88	1.1687	29.863	48	0.00	65	62	
Ave	1018.0	75.0	65	197	6	11	12	30.06	1.1856	30.045	72	0.00	76	74	
Max	1021.1	83.2	71		10	17	25	30.15	1.2164	30.134	95	0.00	84	82	
STD	2.7	6.1	3		3	5	5	.08	.0146	.079	16	0.00	5	6	
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50
Longitude : 76.07

9 JUL 1992

Spesutie Island

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1010.7	77.5	73	205	13	19	8	29.85	1.1691	29.829	86	0.00	78	76	
200	1009.8	77.0	73	218	13	22	9	29.82	1.1691	29.803	87	0.00	78	77	
300	1009.2	76.5	73	221	11	20	9	29.80	1.1695	29.785	90	0.00	77	76	
400	1009.2	76.3	74	222	8	14	9	29.80	1.1696	29.784	92	0.00	76	76	
500	1009.3	76.5	74	223	7	10	9	29.80	1.1693	29.787	92	0.00	77	76	
600	1009.6	77.0	74	227	7	11	9	29.81	1.1684	29.797	92	0.00	78	77	
700	1009.6	78.8	76	231	7	13	11	29.81	1.1642	29.796	90	0.00	80	78	
800	1009.9	80.9	77	241	7	12	11	29.82	1.1598	29.805	87	0.00	82	80	
900	1010.4	83.4	78	244	6	11	12	29.84	1.1546	29.821	83	0.00	85	82	
1000	1010.7	86.0	78	238	6	13	12	29.85	1.1490	29.829	78	0.00	87	85	
1100	1010.7	87.8	79	257	6	16	14	29.85	1.1453	29.829	75	0.00	90	86	
1200	1010.4	89.5	77	264	8	16	15	29.84	1.1420	29.819	66	0.00	91	89	
1300	1010.3	89.4	76	245	7	13	14	29.83	1.1423	29.817	66	0.00	91	88	
1400	1010.1	88.4	80	213	7	14	11	29.83	1.1428	29.810	76	0.00	90	87	
1500	1009.8	90.3	78	222	8	14	14	29.82	1.1391	29.804	68	0.00	91	88	
1600	1009.7	88.0	79	208	9	14	8	29.82	1.1437	29.798	74	0.00	89	87	
1700	1009.7	88.1	79	216	7	13	8	29.82	1.1433	29.798	75	0.00	89	87	
1800	1009.6	86.3	79	212	6	9	9	29.82	1.1471	29.798	78	0.00	87	86	
1900	1009.9	86.3	78	223	5	10	10	29.82	1.1478	29.806	77	0.00	87	85	
2000	1010.1	86.0	77	229	6	11	9	29.83	1.1490	29.812	74	0.00	87	85	
2100	1010.8	85.0	76	238	5	9	9	29.85	1.1523	29.833	74	0.00	85	84	
2200	1011.4	83.8	75	246	6	9	8	29.87	1.1558	29.849	74	0.00	85	83	
2300	1011.5	81.9	73	261	4	7	8	29.87	1.1605	29.852	75	0.00	83	81	
2400	1011.7	80.1	72	246	4	7	8	29.88	1.1648	29.857	77	0.00	81	80	
Min	1009.2	76.3	72		4	7	8	29.80	1.1391	29.784	66	0.00	76	76	
Ave	1010.2	83.4	76	228	7	13	10	29.83	1.1549	29.813	79	0.00	84	83	
Max	1011.7	90.3	80		13	22	15	29.88	1.1696	29.857	92	0.00	91	89	
STD	.7	4.9	2		2	4	2	.02	.0109	.021	8	0.00	5	5	
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50
Longitude : 76.07

10 JUL 1992

Spesutie Island

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1011.9	79.5	73	297	4	7	20	29.88	1.1663	29.864	80	0.00	80	79	
200	1012.1	76.8	73	285	2	4	16	29.89	1.1722	29.869	87	0.00	79	76	
300	1012.2	73.8	71	255	1	3	15	29.89	1.1794	29.874	92	0.00	76	73	
400	1012.9	72.6	71	225	2	3	10	29.91	1.1830	29.894	94	0.00	73	72	
500	1013.4	73.5	72	316	2	5	13	29.93	1.1815	29.909	94	0.00	76	72	
600	1013.5	76.5	73	6	3	5	13	29.93	1.1745	29.911	89	0.00	77	76	
700	1014.0	79.5	74	350	2	4	22	29.94	1.1682	29.927	84	0.00	82	77	
800	1014.6	81.6	74	211	4	6	13	29.96	1.1644	29.944	79	0.00	83	81	
900	1014.7	84.1	74	226	3	6	16	29.96	1.1591	29.947	72	0.00	86	82	
1000	1014.6	86.2	74	221	4	7	18	29.96	1.1547	29.944	67	0.00	88	85	
1100	1014.2	88.0	74	209	4	9	26	29.95	1.1503	29.933	64	0.00	89	87	
1200	1013.6	87.8	76	119	4	8	21	29.93	1.1496	29.914	68	0.00	90	87	
1300	1012.7	89.3	76	172	6	12	17	29.91	1.1454	29.889	65	0.00	91	87	
1400	1012.0	91.1	76	198	8	13	10	29.89	1.1408	29.868	61	0.00	92	91	
1500	1011.4	91.4	76	203	9	13	9	29.87	1.1393	29.850	62	0.00	92	90	
1600	1011.0	92.1	77	213	8	13	10	29.86	1.1373	29.839	62	0.00	93	91	
1700	1010.6	90.0	77	208	7	12	8	29.84	1.1412	29.825	66	0.00	92	89	
1800	1010.4	88.8	78	218	6	11	10	29.84	1.1432	29.820	70	0.00	89	88	
1900	1010.4	87.1	77	229	6	12	13	29.84	1.1469	29.821	72	0.00	88	86	
2000	1010.6	82.9	76	206	8	17	9	29.85	1.1564	29.827	80	0.00	86	82	
2100	1010.6	81.2	76	202	4	10	12	29.84	1.1600	29.825	84	0.00	82	80	
2200	1011.0	80.0	76	206	4	7	6	29.86	1.1632	29.838	87	0.00	81	79	
2300	1011.1	78.7	76	205	4	6	12	29.86	1.1661	29.840	91	0.00	80	77	
2400	1011.2	79.2	76	223	5	11	10	29.86	1.1651	29.845	90	0.00	82	77	
Min	1010.4	72.6	71		1	3	6	29.84	1.1323	29.820	61	0.00	73	72	
Ave	1012.3	83.0	75	213	5	9	14	29.89	1.1582	29.876	78	0.00	84	82	
Max	1014.7	92.1	78		9	17	26	29.96	1.1830	29.947	94	0.00	93	91	
STD	1.5	6.1	2		2	4	5	.04	.0139	.044	12	0.00	6	6	
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 11 JUL 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in.	Max Tmp F	Min Tmp F	MRG Tmp Idx F
100	1011.1	82.0	74	249	7	12	10	29.86	1.1596	29.841	77	0.00	82	82	
200	1011.1	82.4	71	275	8	18	10	29.86	1.1596	29.842	69	0.00	83	81	
300	1010.8	80.9	70	269	7	13	12	29.85	1.1626	29.832	70	0.00	82	80	
400	1011.4	80.0	70	274	9	18	11	29.87	1.1652	29.849	72	0.00	80	79	
500	1011.7	78.5	70	274	7	16	11	29.88	1.1689	29.858	76	0.00	79	78	
600	1012.1	77.3	71	263	4	7	12	29.89	1.1718	29.870	81	0.00	78	77	
700	1012.8	78.5	72	259	4	7	13	29.91	1.1695	29.891	81	0.00	79	77	
800	1013.4	80.5	73	283	6	11	14	29.93	1.1657	29.910	79	0.00	82	79	
900	1013.6	82.8	74	297	7	14	13	29.93	1.1608	29.916	74	0.00	84	82	
1000	1013.8	84.9	74	290	7	14	14	29.94	1.1566	29.919	70	0.00	86	84	
1100	1013.9	86.0	73	295	7	13	13	29.94	1.1545	29.924	66	0.00	87	85	
1200	1014.0	87.5	72	288	8	15	14	29.94	1.1515	29.925	61	0.00	88	87	
1300	1013.7	87.8	73	309	6	12	21	29.93	1.1505	29.917	61	0.00	89	87	
1400	1013.6	86.7	73	2	6	11	18	29.93	1.1526	29.915	64	0.00	88	86	
1500	1013.7	88.2	73	344	5	12	18	29.93	1.1495	29.917	62	0.00	89	87	
1600	1013.8	88.0	71	308	7	14	20	29.94	1.1506	29.919	58	0.00	89	87	
1700	1013.7	88.9	71	298	6	11	12	29.94	1.1488	29.917	56	0.00	89	88	
1800	1013.6	88.2	71	309	4	10	18	29.93	1.1504	29.915	56	0.00	89	88	
1900	1013.8	86.2	69	282	4	8	11	29.94	1.1550	29.921	57	0.00	88	84	
2000	1014.4	82.2	68	249	3	7	9	29.96	1.1646	29.939	62	0.00	84	81	
2100	1014.8	79.2	68	239	3	5	7	29.97	1.1716	29.951	68	0.00	81	77	
2200	1015.4	78.1	69	260	3	5	9	29.98	1.1743	29.962	73	0.00	79	78	
2300	1015.5	77.6	70	286	2	4	27	29.99	1.1752	29.970	78	0.00	78	77	
2400	1015.5	77.4	72	332	1	3	24	29.99	1.1752	29.970	82	0.00	78	76	
Min	1010.8	77.3	68		1	3	7	29.85	1.1488	29.832	56	0.00	78	76	
Ave	1013.4	82.9	71	286	5	11	14	29.93	1.1610	29.908	69	0.00	84	82	
Max	1015.5	88.9	74		9	18	27	29.99	1.1752	29.970	82	0.00	89	88	
STD	1.4	4.1	2		2	4	5	.014	.0090	.040	9	0.00	4	4	
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 12 JUL 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1015.6	76.4	72	297	2	3	19	29.99	1.1773	29.975	87	0.00	78	75	
200	1015.5	73.3	71	203	1	3	4	29.99	1.1845	29.972	93	0.00	75	72	
300	1015.7	73.9	72	275	1	2	6	29.99	1.1833	29.976	93	0.00	75	72	
400	1015.6	75.3	73	354	1	3	22	29.99	1.1797	29.975	92	0.00	76	74	
500	1015.9	74.3	72	220	1	3	12	30.00	1.1825	29.983	93	0.00	76	73	
600	1015.9	77.0	74	46	2	4	13	30.00	1.1759	29.983	91	0.00	78	75	
700	1016.1	77.6	75	34	3	6	15	30.01	1.1746	29.988	91	0.00	79	77	
800	1016.2	79.6	76	65	2	5	22	30.01	1.1700	29.992	88	0.00	81	79	
900	1016.0	80.1	76	159	2	4	19	30.00	1.1685	29.985	88	0.00	83	79	
1000	1016.1	81.6	76	207	4	7	15	30.01	1.1655	29.990	85	0.00	83	81	
1100	1016.2	81.7	76	230	4	7	13	30.01	1.1654	29.992	84	0.00	82	81	
1200	1016.2	82.6	77	234	4	8	11	30.01	1.1631	29.991	83	0.00	83	82	
1300	1015.4	83.2	77	211	6	10	11	29.99	1.1609	29.969	82	0.00	84	82	
1400	1014.7	84.6	77	212	7	11	11	29.97	1.1571	29.948	79	0.00	86	84	
1500	1014.1	85.6	77	211	7	10	11	29.95	1.1544	29.931	75	0.00	87	85	
1600	1013.6	85.7	77	212	7	12	9	29.93	1.1535	29.914	76	0.00	87	85	
1700	1012.8	85.5	78	215	6	10	9	29.91	1.1527	29.890	79	0.00	86	85	
1800	1012.2	86.0	79	216	6	11	9	29.89	1.1507	29.872	80	0.00	87	85	
1900	1011.6	84.1	79	204	5	11	8	29.87	1.1540	29.856	86	0.00	86	83	
2000	1011.4	81.9	78	199	7	10	7	29.87	1.1587	29.849	88	0.00	83	81	
2100	1011.5	80.4	75	209	7	12	7	29.87	1.1632	29.852	82	0.00	81	80	
2200	1011.4	79.9	74	219	6	10	10	29.87	1.1643	29.851	83	0.00	80	80	
2300	1011.2	79.3	75	229	5	10	10	29.86	1.1651	29.843	88	0.00	80	79	
2400	1010.4	79.2	77	219	9	18	9	29.84	1.1626	29.820	92	0.00	80	79	
Min	1010.4	73.3	71		1	2	4	29.84	1.1507	29.820	75	0.00	75	72	
Ave	1014.2	80.4	76	214	4	8	12	29.95	1.1661	29.933	86	0.00	81	80	
Max	1016.2	86.0	79		9	18	22	30.01	1.1845	29.992	93	0.00	87	85	
STD	2.1	3.9	2		2	4	5	.06	.0103	.061	6	0.00	4	4	
Tot												0.00			

Times listed are real time – no corrections are necessary

DATE	TIME	SKY CONDITION (x 100 = Height in feet)	VISIBILITY (Miles)	TOTAL SKY COVER 1/10's	TOTAL OPAQUE
06 July	0800	80 ◐ 120 ⊕	4FH	10	10
	0900	50 ◐ 200 ⊕	5HF	10	10
	1000	50 ◐ 200 ⊕	5RW-HF	10	10
	1100	50 ◐ 200 ⊕	6H	10	10
	1200	50 ◐ 140 ⊕	6H	10	10
	1300	50 ◐ 120 ⊕	6H	10	10
	1400	40 ◐ 120 ◐	10	8	8
	1500	40 ◐ 120 ◐	10	8	8
	1600	3 40 ◐	10	6	6
07 July	0800	50 ◐ 260 ◐	10	2	2
	0900	50 ◐ 260 ◐	10	2	2
	1000	50 ◐ 100 ◐	10	2	2
	1100	50 ◐ 100 ◐ 250 ◐	10	3	2
	1200	50 ◐ 100 ◐ 250 ◐	10	3	2
	1300	50 ◐ 100 ◐	10	3	3
	1400	40 ◐ 90 ◐	10	3	3
	1500	40 ◐ 90 ◐	10	3	3
	1600	40 ◐ 90 ◐ 250 ◐	10	4	3
08 July	0800	45 ◐ 130 ◐ 250 ◐	10	3	2
	0900	130 ◐ 250 ◐	10	4	3
	1000	130 ◐ 250 ◐	10	4	3
	1100	130 ◐ 250 ◐	10	3	2
	1200	130 ◐ 250 ◐	10	2	2
	1300	220 ◐	10	1	1
	1400	220 ◐	10	3	3
	1500	130 ◐ 210 ⊕	10	10	10
	1600	130 ◐ 210 ⊕	10	10	10
09 July	0800	140 ◐ 200 ⊕	4H	10	9
	0900	140 ◐ 200 ⊕	4H	10	9
	1000	120 ◐ 200 ⊕	5H	10	8
	1100	100 ◐ 200 ⊕	6H	10	8
	1200	230 ⊕	6H	10	8
	1300	230 ⊕	6H	10	8
	1400	230 ⊕	7	10	8
	1500	230 ⊕	7	10	8
	1600	40 ◐ 230 ◐ 280 ⊕	7	10	7
10 July	0800	250 – ◐	7	6	2
	0900	250 ◐	8	3	3
	1000	250 ◐	8	3	2
	1100	250 – ◐	9	2	1
	1200	250 – ◐	10	1	0
	1300	250 – ◐	10	1	0
	1400	250 – ◐	10	3	1
	1500	250 – ◐	10	2	1
	1600	250 – ◐	9	2	1

KEY

GF= Ground Fog
F= Fog
H= Haze
K= Smoke
BS= Blowing Snow
BN= Blowing Sand
BD= Blowing Dust
IF= Ice Fog
D= Dust
BY= Blowing Spray

****

T= Thunderstorm
T+= Severe Thunderstorm
R= Rain
RW= Rainshower
L= Drizzle
ZR= Freezing Rain
ZL= Freezing Drizzle
IP= Ice Pellets (Sleet)
IPW=Ice Pellet Shower
S= Snow
SW= Snow Shower
SP= Snow Pellets
SG= Snow Grains
IC= Ice Crystals
A= Hail

****

Intensity of precip.:
– = Light
+ = Heavy
No symbol = Moderate

****

Sky Condition:
◯ = Clear = less than 1/10
◐ = Scattered = 1/10–5/10
◍ = Broken = 6/10–9/10
⊕ = Overcast = 10/10 of sky is covered.

NOTE: A layer of clouds is considered to be ... if ½ or more of it is transparent; the sky condition symbol will be preceded by a (–) in such cases.
Visibilities of 7 or more miles are classified as unrestricted.
(– X) - sky partially obscured by surface based phenomena
(W 2 X) - sky completely obscured; vertical visibility is 200 feet

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 24 AUG 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1028.0	64.2	63	1	2	3	15	30.36	1.2197	30.280	95	0.00	65	64	61
200	1027.9	61.9	61	22	1	2	26	30.35	1.2254	30.276	96	0.00	63	61	59
300	1027.9	61.3	60	21	1	3	16	30.35	1.2270	30.278	96	0.00	62	61	59
400	1027.9	60.9	60	6	1	2	13	30.35	1.2282	30.277	97	0.00	62	60	58
500	1027.9	59.6	59	332	1	2	20	30.35	1.2314	30.276	97	0.00	60	59	57
600	1028.2	58.6	58	21	0	2	22	30.36	1.2344	30.286	97	0.00	59	58	56
700	1028.3	60.2	59	312	1	3	38	30.37	1.2304	30.289	97	0.00	63	58	59
800	1028.3	67.9	66	111	1	2	33	30.37	1.2109	30.291	95	0.00	72	63	70
900	1028.4	73.6	70	242	2	6	28	30.37	1.1971	30.292	88	0.00	74	72	75
1000	1028.4	75.3	70	234	3	9	27	30.37	1.1931	30.294	84	0.00	77	74	75
1100	1028.1	77.3	71	220	3	8	26	30.36	1.1881	30.284	81	0.00	78	76	76
1200	1027.7	78.2	71	226	4	10	22	30.35	1.1856	30.272	79	0.00	79	77	76
1300	1027.2	79.3	70	202	5	10	23	30.33	1.1828	30.256	74	0.00	80	79	77
1400	1026.6	80.3	70	204	5	11	24	30.32	1.1798	30.238	72	0.00	81	79	78
1500	1025.9	81.2	70	220	6	12	20	30.30	1.1773	30.219	68	0.00	82	81	78
1600	1025.7	81.6	66	209	6	10	17	30.29	1.1774	30.214	59	0.00	82	81	75
1700	1025.5	81.5	54	215	6	10	9	30.28	1.1797	30.208	39	0.00	82	81	72
1800	1025.3	80.1	57	226	4	7	8	30.28	1.1821	30.201	46	0.00	81	79	71
1900	1025.3	75.5	61		0	2	27	30.28	1.1913	30.201	61	0.00	79	72	67
2000	1025.3	70.2	61	283	1	2	17	30.28	1.2032	30.202	74	0.00	72	68	64
2100	1025.5	67.1	62	314	1	3	12	30.28	1.2104	30.206	83	0.00	68	66	62
2200	1025.4	65.7	61		1	2	8	30.28	1.2137	30.205	84	0.00	66	65	61
2300	1025.2	64.3	62		0	1	13	30.28	1.2167	30.199	91	0.00	65	64	61
2400	1025.1	64.1	62		0	2	13	30.27	1.2169	30.196	93	0.00	64	64	61
Min	1025.1	58.6	54		0	1	8	30.27	1.1773	30.196	39	0.00	59	58	56
Ave	1026.9	70.4	64	223	2	5	20	30.32	1.2043	30.248	81	0.00	72	69	67
Max	1028.4	81.6	71		6	12	38	30.37	1.2344	30.294	97	0.00	82	81	78
STD	1.3	8.3	5		2	4	8	.04	.0199	.038	17	0.00	8	8	8
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 25 AUG 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1024.9	63.5	62		0	2	11	30.27	1.2181	30.190	94	0.00	64	63	60
200	1024.4	62.9	62		0	2	9	30.25	1.2189	30.176	95	0.00	63	63	60
300	1024.2	62.4	61	336	1	2	10	30.25	1.2198	30.169	96	0.00	63	62	60
400	1024.0	62.5	61	349	0	2	30	30.24	1.2195	30.164	96	0.00	63	62	60
500	1023.9	62.3	61	278	1	2	20	30.24	1.2197	30.161	96	0.00	63	62	60
600	1024.4	62.5	61	348	1	2	16	30.25	1.2198	30.174	96	0.00	63	62	60
700	1024.5	64.2	63		0	2	26	30.25	1.2156	30.178	96	0.00	68	62	63
800	1024.5	72.3	70	257	2	6	23	30.25	1.1954	30.177	92	0.00	74	68	73
900	1024.5	75.1	72	258	3	6	17	30.26	1.1885	30.179	90	0.00	77	74	75
1000	1024.4	79.6	75	241	3	8	24	30.25	1.1775	30.176	86	0.00	82	77	79
1100	1024.2	81.5	76	249	3	7	25	30.24	1.1728	30.168	84	0.00	83	81	79
1200	1023.8	82.6	77	248	2	5	29	30.24	1.1699	30.159	83	0.00	84	82	81
1300	1023.6	85.9	78	235	3	6	36	30.23	1.1619	30.151	79	0.00	87	84	85
1400	1022.9	87.3	79	220	2	6	36	30.21	1.1582	30.132	75	0.00	88	86	84
1500	1022.4	86.1	79	195	4	10	22	30.19	1.1599	30.116	79	0.00	87	85	82
1600	1022.0	86.1	78	213	3	8	19	30.18	1.1597	30.103	78	0.00	87	85	82
1700	1021.6	85.8	78	189	4	7	14	30.17	1.1598	30.092	78	0.00	86	85	81
1800	1021.3	82.9	76	201	3	6	11	30.16	1.1666	30.084	79	0.00	85	82	77
1900	1021.0	80.4	75	257	2	6	13	30.15	1.1720	30.076	84	0.00	82	78	75
2000	1021.3	77.1	74	294	1	3	28	30.16	1.1799	30.083	89	0.00	78	75	73
2100	1021.5	75.6	73	243	1	3	32	30.17	1.1836	30.090	92	0.00	76	75	72
2200	1021.7	74.7	73	329	1	2	23	30.17	1.1860	30.097	94	0.00	75	74	72
2300	1021.6	73.4	72	287	2	3	9	30.17	1.1888	30.092	94	0.00	74	73	71
2400	1021.2	73.2	71	55	2	4	22	30.16	1.1892	30.083	94	0.00	74	72	71
Min	1021.0	62.3	61		0	2	9	30.15	1.1582	30.076	75	0.00	63	62	60
Ave	1023.1	75.0	71	238	2	5	21	30.21	1.1875	30.136	88	0.00	76	74	72
Max	1024.9	87.3	79		4	10	36	30.27	1.2198	30.190	96	0.00	88	86	85
STD	1.4	9.1	7		1	2	9	.04	.0230	.041	7	0.00	9	9	9
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 26 AUG 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1020.7	72.7	71	273	2	3	11	30.14	1.1897	30.068	94	0.00	73	72	70
200	1020.3	71.7	70	290	2	3	15	30.13	1.1918	30.054	95	0.00	73	71	69
300	1019.9	70.4	69	295	1	3	38	30.12	1.1945	30.044	95	0.00	72	70	68
400	1019.7	69.4	68		1	2	30	30.11	1.1967	30.038	95	0.00	70	68	67
500	1020.1	68.4	67	253	1	2	23	30.12	1.1996	30.047	96	0.00	69	68	66
600	1020.5	67.8	67		0	2	29	30.14	1.2017	30.061	97	0.00	68	68	65
700	1021.0	68.2	67	230	1	2	4	30.15	1.2011	30.074	97	0.00	69	68	67
800	1021.3	72.2	71		1	3	15	30.16	1.1915	30.084	96	0.00	75	69	73
900	1021.3	78.5	74	344	2	5	20	30.16	1.1766	30.085	87	0.00	81	75	78
1000	1021.3	83.2	75	358	3	8	28	30.16	1.1662	30.086	76	0.00	84	81	80
1100	1021.1	85.4	75	26	4	10	25	30.16	1.1613	30.080	72	0.00	86	84	83
1200	1020.7	86.7	75	17	5	11	23	30.14	1.1580	30.066	68	0.00	88	86	83
1300	1020.1	88.3	74	344	5	12	24	30.13	1.1543	30.049	62	0.00	89	88	84
1400	1019.5	89.1	73	346	5	11	23	30.11	1.1521	30.031	60	0.00	90	89	84
1500	1018.8	89.9	74	352	4	8	27	30.09	1.1495	30.010	59	0.00	90	89	85
1600	1018.2	90.4	74	323	3	7	27	30.07	1.1477	29.993	58	0.00	91	90	85
1700	1018.1	90.2	74	322	2	5	21	30.07	1.1481	29.990	58	0.00	91	90	83
1800	1017.9	88.1	74	246	2	5	15	30.06	1.1522	29.985	64	0.00	90	85	80
1900	1018.0	82.1	75	279	3	5	7	30.06	1.1647	29.988	79	0.00	85	80	76
2000	1018.4	77.8	74	284	1	4	16	30.08	1.1750	30.000	88	0.00	80	76	73
2100	1018.6	75.0	72	282	1	4	37	30.08	1.1817	30.004	92	0.00	76	75	72
2200	1018.6	74.0	72	259	1	2	18	30.08	1.1842	30.004	92	0.00	75	73	71
2300	1018.4	72.8	71	18	1	3	16	30.08	1.1869	29.999	93	0.00	74	72	69
2400	1018.3	71.7	70	26	1	3	31	30.07	1.1894	29.995	94	0.00	72	71	69
Min	1017.9	67.8	67		0	2	4	30.06	1.1477	29.985	58	0.00	68	68	65
Ave	1019.6	78.5	72	333	2	5	22	30.11	1.1756	30.035	82	0.00	80	77	75
Max	1021.3	90.4	75		5	12	38	30.16	1.2017	30.086	97	0.00	91	90	85
STD	1.2	8.2	3		1	3	8	.04	.0190	.036	15	0.00	8	8	7
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 27 AUG 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1017.9	71.0	69	2	1	2	27	30.06	1.1908	29.984	94	0.00	71	71	68
200	1017.4	70.3	69	329	1	2	16	30.05	1.1920	29.970	94	0.00	71	70	68
300	1017.2	68.8	67	294	1	3	19	30.04	1.1954	29.964	95	0.00	70	68	66
400	1016.8	68.7	67	300	1	3	35	30.03	1.1952	29.952	95	0.00	69	68	66
500	1016.7	68.4	67	276	1	3	11	30.02	1.1957	29.948	95	0.00	69	68	66
600	1016.9	68.0	67	268	1	2	9	30.03	1.1970	29.954	95	0.00	69	68	66
700	1017.0	69.7	68		0	2	18	30.03	1.1929	29.957	95	0.00	72	68	68
800	1017.2	75.6	73	285	1	4	30	30.04	1.1785	29.964	91	0.00	78	72	75
900	1017.2	81.2	76	240	1	3	35	30.04	1.1654	29.963	85	0.00	83	78	81
1000	1017.0	85.1	78	285	2	5	30	30.03	1.1562	29.958	79	0.00	86	84	83
1100	1016.8	88.3	78	259	2	4	42	30.03	1.1493	29.950	72	0.00	89	87	86
1200	1016.3	89.6	77	236	3	7	32	30.01	1.1463	29.936	66	0.00	91	89	86
1300	1015.6	89.9	77	208	4	10	29	29.99	1.1449	29.917	66	0.00	90	89	86
1400	1014.7	89.5	76	203	5	9	17	29.97	1.1450	29.889	64	0.00	90	89	85
1500	1013.8	89.9	75	184	4	8	18	29.94	1.1434	29.864	62	0.00	90	89	84
1600	1013.2	89.6	73	189	4	8	16	29.92	1.1440	29.845	58	0.00	90	89	83
1700	1012.7	88.1	73	198	4	6	14	29.91	1.1467	29.830	60	0.00	89	87	80
1800	1012.8	85.4	73	214	3	6	8	29.91	1.1522	29.832	67	0.00	87	84	78
1900	1012.9	81.7	73	202	2	3	13	29.91	1.1602	29.836	75	0.00	84	80	75
2000	1013.2	78.6	73	140	2	5	24	29.92	1.1674	29.846	83	0.00	80	77	73
2100	1013.5	76.9	73	192	2	6	14	29.93	1.1712	29.855	88	0.00	78	76	72
2200	1013.1	75.9	73	228	2	4	11	29.92	1.1733	29.844	90	0.00	76	75	72
2300	1012.6	73.8	72	308	1	2	19	29.90	1.1776	29.829	93	0.00	75	73	71
2400	1012.4	72.4	71	25	1	2	25	29.90	1.1806	29.821	94	0.00	73	72	70
Min	1012.4	68.0	67		0	2	8	29.90	1.1434	29.821	58	0.00	69	68	66
Ave	1015.2	79.0	72	217	2	5	21	29.98	1.1692	29.905	81	0.00	80	78	75
Max	1017.9	89.9	78		5	10	42	30.06	1.1970	29.984	95	0.00	91	89	86
STD	2.0	8.3	4		1	2	9	.06	.0200	.059	14	0.00	8	8	7
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 28 AUG 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1011.9	71.4	70	24	1	2	19	29.88	1.1827	29.807	94	0.00	72	71	69
200	1011.4	71.9	70	110	1	3	22	29.87	1.1807	29.793	94	0.00	72	71	70
300	1011.3	72.0	70	229	1	3	23	29.86	1.1804	29.789	94	0.00	72	72	70
400	1011.1	72.1	70		0	3	11	29.86	1.1799	29.784	94	0.00	72	72	70
500	1011.0	71.4	70	189	1	4	12	29.86	1.1815	29.780	95	0.00	72	71	69
600	1011.2	70.8	69	118	1	3	14	29.86	1.1833	29.787	94	0.00	71	70	68
700	1011.0	72.3	70	154	3	6	16	29.86	1.1795	29.781	93	0.00	74	70	70
800	1010.8	74.6	72	192	4	11	13	29.85	1.1736	29.776	92	0.00	75	74	73
900	1010.7	77.3	74	188	6	12	14	29.85	1.1669	29.770	90	0.00	79	75	76
1000	1010.1	80.5	76	173	7	12	15	29.83	1.1588	29.756	87	0.00	82	79	79
1100	1009.3	83.3	77	174	8	17	16	29.81	1.1516	29.730	82	0.00	85	82	81
1200	1008.4	85.1	74	195	10	20	15	29.78	1.1477	29.705	69	0.00	87	83	
1300	1007.3	85.9	72	185	10	22	15	29.75	1.1453	29.671	63	0.00	87	85	
1400	1005.9	85.3	70	174	11	23	13	29.71	1.1454	29.631	61	0.00	87	84	
1500	1004.5	83.7	70	177	10	24	13	29.67	1.1471	29.590	64	0.00	84	83	
1600	1002.7	84.4	72	162	10	22	13	29.61	1.1431	29.536	66	0.00	86	83	
1700	1001.3	81.7	73	156	11	24	12	29.57	1.1471	29.496	74	.01	84	79	
1800	1000.9	76.2	73	206	13	28	14	29.56	1.1583	29.484	89	.21	79	74	
1900	1002.6	73.2	70	246	14	28	10	29.61	1.1677	29.533	89	0.00	74	72	
2000	1004.7	71.6	67	261	11	18	9	29.67	1.1743	29.594	86	0.00	72	71	
2100	1006.1	70.3	66	266	8	18	8	29.71	1.1793	29.636	85	0.00	71	70	
2200	1007.1	70.3	66	256	8	15	8	29.74	1.1803	29.667	86	0.00	71	70	
2300	1008.1	69.9	66	260	7	16	9	29.77	1.1826	29.697	86	0.00	71	69	
2400	1009.1	68.9	64	273	6	12	9	29.80	1.1864	29.725	85	0.00	69	68	
Min	1000.9	68.9	64		0	2	8	29.56	1.1431	29.484	61	0.00	69	68	68
Ave	1007.9	76.0	70	205	7	14	14	29.76	1.1676	29.688	84	.01	77	75	72
Max	1011.9	85.9	77		14	28	23	29.88	1.1864	29.807	95	.21	87	85	81
STD	3.5	6.0	3		4	9	4	.10	.0155	.103	11	.04	6	6	5
Tot												.22			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 29 AUG 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1009.7	67.5	61	279	6	12	11	29.82	1.1909	29.743	81	0.00	68	67	
200	1010.2	65.8	59	285	5	11	12	29.83	1.1959	29.757	79	0.00	67	64	
300	1010.8	63.2	58	263	3	7	9	29.85	1.2027	29.776	82	0.00	64	62	
400	1011.5	62.4	57	256	4	7	7	29.87	1.2055	29.795	83	0.00	63	61	
500	1012.4	59.9	56	262	3	5	8	29.90	1.2125	29.822	88	0.00	61	59	
600	1013.3	59.1	56	258	3	4	6	29.92	1.2157	29.849	89	0.00	60	59	
700	1014.0	61.2	57	273	4	10	8	29.95	1.2113	29.869	86	0.00	63	59	
800	1014.8	64.9	58	278	7	13	10	29.97	1.2036	29.893	78	0.00	67	63	
900	1015.1	68.1	57	283	8	16	13	29.98	1.1968	29.902	67	0.00	69	67	
1000	1015.2	69.6	56	286	8	17	16	29.98	1.1937	29.904	63	0.00	70	69	
1100	1015.1	70.0	56	293	9	19	17	29.98	1.1928	29.901	60	0.00	71	69	
1200	1015.1	71.1	55	291	9	19	16	29.98	1.1904	29.900	57	0.00	73	70	
1300	1015.1	72.7	55	292	9	22	22	29.98	1.1867	29.900	54	0.00	74	72	
1400	1015.3	71.9	53	297	9	21	17	29.98	1.1891	29.905	52	0.00	73	71	
1500	1015.4	71.8	53	292	10	21	16	29.99	1.1896	29.909	51	0.00	73	71	
1600	1015.8	71.2	52	299	8	20	18	30.00	1.1916	29.922	51	0.00	72	70	
1700	1016.3	69.7	51	300	8	18	16	30.01	1.1957	29.937	51	0.00	72	69	
1800	1016.9	69.0	52	305	5	12	18	30.03	1.1979	29.954	54	0.00	70	68	
1900	1017.6	65.1	52	311	2	5	14	30.05	1.2075	29.973	62	0.00	68	63	
2000	1018.1	60.3	53	286	2	5	12	30.07	1.2191	29.990	77	0.00	63	59	
2100	1018.7	58.8	53	273	2	3	6	30.08	1.2234	30.007	82	0.00	59	57	
2200	1019.3	55.9	53	261	1	2	10	30.10	1.2311	30.023	89	0.00	57	55	
2300	1019.5	54.3	52	278	1	2	19	30.11	1.2353	30.030	93	0.00	55	53	
2400	1019.6	53.0	51	265	1	3	22	30.11	1.2385	30.032	94	0.00	54	52	
Min	1009.7	53.0	51		1	2	6	29.82	1.1867	29.743	51	0.00	54	52	
Ave	1015.2	64.9	55	287	5	11	13	29.98	1.2049	29.904	72	0.00	66	64	
Max	1019.6	72.7	61		10	22	22	30.11	1.2385	30.032	94	0.00	74	72	
STD	2.8	6.0	3		3	7	5	.08	.0154	.083	15	0.00	6	6	
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 30 AUG 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1019.7	52.7	51	282	2	3	15	30.11	1.2395	30.035	95	0.00	53	52	
200	1019.9	52.4	51	283	2	3	8	30.12	1.2404	30.042	94	0.00	53	52	
300	1020.3	51.7	50	237	1	2	21	30.13	1.2429	30.053	94	0.00	52	51	
400	1020.1	50.7	49	245	2	3	12	30.13	1.2451	30.049	95	0.00	51	50	
500	1020.1	51.1	50	272	2	3	14	30.13	1.2442	30.049	94	0.00	52	50	
600	1020.5	50.7	49	270	2	3	12	30.14	1.2458	30.060	94	0.00	52	50	
700	1021.1	55.0	53	269	2	4	7	30.15	1.2353	30.076	92	0.00	58	52	
800	1021.1	61.3	57	265	4	9	7	30.15	1.2195	30.077	85	0.00	64	58	
900	1021.0	66.1	58	258	7	10	9	30.15	1.2083	30.075	76	0.00	69	64	
1000	1021.1	69.9	58	233	7	12	13	30.15	1.1995	30.077	67	0.00	71	68	
1100	1020.8	72.4	57	243	9	14	11	30.14	1.1936	30.068	59	0.00	73	71	
1200	1020.2	74.1	59	224	9	16	14	30.13	1.1888	30.049	59	0.00	75	73	
1300	1019.3	75.1	60	220	11	20	12	30.10	1.1855	30.025	59	0.00	76	74	
1400	1018.2	75.7	61	212	12	22	12	30.07	1.1826	29.992	59	0.00	76	75	
1500	1017.4	76.2	61	214	13	20	11	30.04	1.1807	29.968	59	0.00	77	76	
1600	1016.8	76.7	61	210	12	22	11	30.03	1.1788	29.951	59	0.00	77	76	
1700	1016.7	76.5	61	222	12	19	11	30.02	1.1790	29.948	59	0.00	77	76	
1800	1016.7	75.1	62	215	10	16	9	30.02	1.1820	29.948	65	0.00	76	74	
1900	1016.4	72.4	64	216	7	14	8	30.02	1.1873	29.940	75	0.00	74	71	
2000	1016.2	70.7	64	223	6	10	7	30.01	1.1907	29.934	78	0.00	72	70	
2100	1016.3	70.3	64	216	4	10	7	30.01	1.1918	29.937	80	0.00	72	69	
2200	1016.3	70.9	66	231	6	12	8	30.01	1.1900	29.936	83	0.00	73	69	
2300	1015.9	73.0	66	236	8	14	9	30.00	1.1847	29.925	78	0.00	73	73	
2400	1015.8	72.8	65	243	8	14	8	30.00	1.1854	29.922	76	0.00	73	72	
Min	1015.8	50.7	49		1	2	7	30.00	1.1788	29.922	59	0.00	51	50	
Ave	1018.7	66.4	58	229	7	12	11	30.08	1.2051	30.006	76	0.00	67	65	
Max	1021.1	76.7	66		13	22	21	30.15	1.2458	30.077	95	0.00	77	76	
STD	2.0	10.0	6		4	7	3	.06	.0258	.059	14	0.00	10	10	
Tot												0.00			

SPESUTIE ISLAND OBSERVATION SITE

Times listed are real time – no corrections are necessary

DATE 1992	TIME	SKY CONDITION (x 100 = Height in feet)	VISIBILITY (Miles)	TOTAL SKY COVER 1/10's	TOTAL OPAQUE
24AUG	0800	-X8⊕290⊕	2FH	8	7
	0900	-X8⊕290⊕	2FH	5	4
	1000	-X10⊕290⊕	3FH	5	4
	1100	12⊕290⊕	4H	4	3
	1200	30⊕270⊕	5H	4	3
	1300	270-⊕	5H	7	2
	1400	270-⊕	7	4	2
	1500	270-⊕	7	2	1
	1600	270-⊕	8	2	1
25AUG	0800	250⊕	2FH	6	4
	0900	250⊕	2FH	3	2
	1000	250⊕	3H	3	2
	1100	250⊕	3H	2	2
	1200	250⊕	3H	7	6
	1300	250⊕	3H	10	9
	1400	250⊕	4H	8	7
	1500	250⊕	4H	7	5
	1600	160⊕250⊕	5H	7	5
26AUG	0800	-X250⊕	2FH	6	5
	0900	-X250⊕	3H	6	5
	1000	130⊕250⊕	3H	5	4
	1100	130⊕250⊕	5H	3	2
	1200	130⊕250⊕	5H	3	2
	1300	250⊕	5H	2	2
	1400	250⊕	5H	4	3
	1500	250⊕	5H	5	4
	1600	250⊕	5H	5	4
27AUG	0800	-X	1½FH	4	4
	0900	-X	2FH	3	3
	1000	-X	2FH	3	3
	1100	-X	2FH	3	3
	1200	-X	2HF	3	3
	1300	-X	3H	2	2
	1400	-X210⊕	3H	4	4
	1500	-X210⊕	3H	6	6
	1600	-X210⊕	3H	3	3
28AUG	0800	-X	1FH	4	4
	0900	-X110⊕	1FH	5	5
	1000	110⊕	3H	6	6
	1100	30⊕110⊕260⊕	5H	8	8
	1200	30⊕110⊕	5H	10	10
	1300	35⊕110⊕	7	8	8
	1400	35⊕110⊕	10	7	7
	1500	35⊕120⊕	10	3	3
	1600	35⊕	10	8	8

KEY

GF= Ground Fog
F= Fog
H= Haze
K= Smoke
BS= Blowing Snow
BN= Blowing Sand
BD= Blowing Dust
IF= Ice Fog
D= Dust
BY= Blowing Spray

****

T= Thunderstorm
T+= Severe Thunderstorm
R= Rain
RW= Rainshower
L= Drizzle
ZR= Freezing Rain
ZL= Freezing Drizzle
IP= Ice Pellets (Sleet)
IPW=Ice Pellet Shower
S= Snow
SW= Snow Shower
SP= Snow Pellets
SG= Snow Grains
IC= Ice Crystals
A= Hail

****

Intensity of precip.:
- = Light
+ = Heavy
No symbol = Moderate

****

Sky Condition:
○= Clear = less than 1/10
◐= Scattered = 1/10–5/10
◍= Broken = 6/10–9/10
⊕= Overcast = 10/10 of sky is covered.

NOTE: A layer of clouds is considered to be thin if ½ or more of it is transparent; the sky condition symbol will be preceded by a (-) in such cases.
Visibilities of 7 or more miles are classified as unrestricted.
(- X) = sky partially obscured by surface based phenomena
(W 2 X) = sky completely obscured; vertical visibility is 200 feet

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 31 AUG 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1015.6	72.1	65	242	7	11	8	29.99	1.1867	29.915	77	0.00	72	71	
200	1015.2	70.7	64	255	6	11	7	29.98	1.1895	29.905	79	0.00	72	69	
300	1015.1	68.4	63	255	4	6	7	29.98	1.1949	29.901	83	0.00	69	67	
400	1015.2	66.8	63	270	3	5	7	29.98	1.1986	29.903	87	0.00	67	66	
500	1015.4	65.9	63	272	3	5	6	29.99	1.2008	29.909	89	0.00	66	66	
600	1015.9	66.1	63	285	3	5	7	30.00	1.2009	29.924	90	0.00	66	66	
700	1016.5	66.7	64	257	3	5	11	30.02	1.2001	29.941	90	0.00	68	66	
800	1016.9	69.1	65	268	3	5	9	30.03	1.1947	29.953	88	0.00	70	68	
900	1017.2	73.2	67	272	5	9	12	30.04	1.1855	29.963	82	0.00	76	70	
1000	1017.2	78.3	67	299	6	12	22	30.04	1.1743	29.962	68	0.00	79	77	
1100	1017.2	78.9	64	301	7	15	18	30.04	1.1737	29.962	61	0.00	80	78	79
1200	1016.9	79.7	63	286	8	18	17	30.03	1.1720	29.954	57	0.00	80	79	78
1300	1016.6	81.4	61	294	7	15	20	30.02	1.1684	29.947	50	0.00	82	80	79
1400	1016.4	82.1	55	307	8	17	19	30.02	1.1678	29.941	40	0.00	82	82	79
1500	1016.3	81.3	54	296	8	16	18	30.01	1.1696	29.938	39	0.00	82	81	78
1600	1016.5	80.2	53	282	9	15	14	30.02	1.1722	29.942	40	0.00	81	80	77
1700	1016.7	79.6	54	295	7	15	17	30.03	1.1739	29.949	41	0.00	80	79	76
1800	1017.0	78.2	54	287	4	11	12	30.03	1.1770	29.958	44	0.00	79	77	74
1900	1017.2	72.3	57	284	2	3	7	30.04	1.1898	29.964	60	0.00	76	68	68
2000	1017.9	66.4	59	272	1	3	17	30.06	1.2036	29.982	78	0.00	68	65	63
2100	1018.5	66.0	59	311	2	4	23	30.08	1.2053	30.001	78	0.00	67	65	61
2200	1018.6	64.0	58	319	2	5	16	30.08	1.2103	30.004	80	0.00	66	63	59
2300	1019.0	65.2	55	341	2	8	20	30.09	1.2072	30.015	69	0.00	67	65	59
2400	1019.2	66.4	54	356	3	8	21	30.10	1.2062	30.021	64	0.00	67	65	59
Min	1015.1	64.0	53		1	3	6	29.98	1.1678	29.901	39	0.00	66	63	59
Ave	1016.8	72.5	60	286	5	9	14	30.03	1.1885	29.952	68	0.00	74	71	71
Max	1019.2	82.1	67		9	18	23	30.10	1.2103	30.021	90	0.00	82	82	79
STD	1.2	6.4	5		2	5	6	.03	.0144	.034	18	0.00	6	7	8
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 1 SEP 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1019.5	64.2	54	343	3	6	17	30.11	1.2117	30.032	68	0.00	65	63	58
200	1019.9	62.3	53	328	2	3	14	30.12	1.2165	30.042	72	0.00	63	61	57
300	1020.2	59.4	53	336	1	3	34	30.13	1.2238	30.050	80	0.00	61	56	55
400	1020.5	58.3	54	317	1	4	15	30.14	1.2267	30.060	85	0.00	60	56	53
500	1021.0	57.1	53	9	1	2	22	30.15	1.2301	30.075	87	0.00	58	56	52
600	1021.8	56.0	53	19	1	2	12	30.17	1.2337	30.092	90	0.00	57	56	52
700	1022.4	59.0	56		0	2	34	30.19	1.2268	30.116	89	0.00	63	56	57
800	1022.9	66.9	60	78	2	5	28	30.21	1.2082	30.131	77	0.00	69	63	65
900	1023.1	70.7	58	27	2	5	26	30.21	1.2001	30.135	64	0.00	72	69	69
1000	1023.1	73.7	57	351	2	7	50	30.21	1.1937	30.137	56	0.00	75	72	72
1100	1023.0	75.3	55	334	3	7	52	30.21	1.1905	30.135	49	0.00	76	74	75
1200	1022.5	76.9	53	20	3	8	43	30.20	1.1865	30.119	44	0.00	78	75	78
1300	1022.1	75.5	56	177	4	11	28	30.18	1.1887	30.108	51	0.00	77	74	76
1400	1021.6	76.1	57	242	4	10	42	30.17	1.1866	30.093	52	0.00	77	74	75
1500	1021.2	75.9	57	263	2	6	47	30.16	1.1866	30.080	52	0.00	78	74	74
1600	1020.8	77.6	58	219	5	11	21	30.15	1.1820	30.069	51	0.00	79	76	77
1700	1020.8	76.4	58	218	6	12	10	30.15	1.1849	30.069	52	0.00	78	75	74
1800	1020.9	74.9	59	223	5	10	8	30.15	1.1878	30.070	59	0.00	76	73	72
1900	1021.1	70.6	60	224	3	6	6	30.15	1.1975	30.077	70	0.00	73	68	67
2000	1021.5	66.3	60	244	1	3	25	30.17	1.2078	30.089	82	0.00	68	65	63
2100	1021.9	62.7	60		1	2	18	30.18	1.2167	30.101	90	0.00	65	61	60
2200	1022.4	61.3	59	286	2	4	34	30.19	1.2206	30.114	92	0.00	62	61	58
2300	1022.6	59.5	58	308	1	2	14	30.20	1.2255	30.121	93	0.00	61	59	56
2400	1022.9	57.6	56	286	1	3	30	30.21	1.2308	30.130	95	0.00	58	57	55
Min	1019.5	56.0	53		0	2	6	30.11	1.1820	30.032	44	0.00	57	56	52
Ave	1021.7	67.3	57	250	2	6	26	30.17	1.2068	30.094	71	0.00	69	66	64
Max	1023.1	77.6	60		6	12	52	30.21	1.2337	30.137	95	0.00	79	76	78
STD	1.1	7.7	3		2	3	14	.03	.0178	.031	17	0.00	8	8	9
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 20
Latitude : 39.28 2 SEP 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1023.2	57.6	56	322	1	5	37	30.22	1.2311	30.139	93	0.00	60	56	54
200	1023.3	56.5	55	352	1	2	32	30.22	1.2342	30.142	94	0.00	57	56	53
300	1023.3	57.0	55	64	1	2	14	30.22	1.2328	30.142	94	0.00	58	56	53
400	1023.4	55.9	54		1	3	22	30.22	1.2358	30.145	95	0.00	56	55	52
500	1023.5	55.9	54	11	2	4	35	30.22	1.2360	30.148	92	0.00	57	55	52
600	1024.1	54.2	53	49	1	2	34	30.24	1.2409	30.166	94	0.00	55	54	51
700	1024.4	59.3	57	63	3	8	19	30.25	1.2282	30.173	92	0.00	64	54	56
800	1024.6	64.6	60	72	7	12	8	30.26	1.2155	30.182	85	0.00	66	64	60
900	1025.0	65.8	59	86	8	13	8	30.27	1.2133	30.192	79	0.00	66	65	62
1000	1025.1	67.6	60	88	7	10	11	30.27	1.2091	30.195	78	0.00	68	66	64
1100	1025.0	69.4	62	102	5	9	17	30.27	1.2046	30.192	77	0.00	70	68	68
1200	1024.4	70.6	63	102	5	8	13	30.25	1.2009	30.174	76	0.00	71	70	69
1300	1023.8	71.6	64	93	3	7	14	30.23	1.1976	30.158	78	0.00	74	70	70
1400	1023.2	74.2	67	84	3	6	19	30.21	1.1904	30.138	77	0.00	75	74	72
1500	1022.8	73.8	67	66	3	6	13	30.21	1.1908	30.128	79	0.00	74	73	71
1600	1022.2	74.3	68	73	2	4	14	30.19	1.1886	30.109	81	0.00	75	74	72
1700	1021.8	75.0	69	70	1	3	24	30.17	1.1865	30.098	81	0.00	75	75	72
1800	1021.6	73.8	69	84	2	3	21	30.17	1.1888	30.092	85	0.00	74	73	71
1900	1021.3	73.1	68	124	3	5	8	30.16	1.1902	30.084	85	0.00	74	73	69
2000	1021.7	71.6	67	104	3	4	9	30.17	1.1943	30.095	86	0.00	73	71	68
2100	1022.0	71.3	67	91	2	4	12	30.18	1.1954	30.104	88	0.00	71	71	68
2200	1022.0	70.8	67	151	2	4	16	30.18	1.1966	30.106	87	.01	72	69	67
2300	1021.5	69.1	66	158	3	6	30	30.17	1.2001	30.089	89	0.00	70	68	66
2400	1021.3	67.9	65	165	1	4	31	30.16	1.2026	30.083	92	0.00	68	68	65
Min	1021.3	54.2	53		1	2	8	30.16	1.1865	30.083	76	0.00	55	54	51
Ave	1023.1	66.7	62	87	3	6	19	30.21	1.2085	30.136	86	.00	68	66	64
Max	1025.1	75.0	69		8	13	37	30.27	1.2409	30.195	95	.01	75	75	72
STD	1.3	7.1	6		2	3	9	.04	.0184	.037	7	.00	7	7	8
Tot												.01			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 20
Latitude : 39.28 3 SEP 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1020.6	68.4	66	197	2	5	12	30.14	1.2006	30.064	92	0.00	69	68	65
200	1020.4	69.8	67	234	6	12	11	30.13	1.1968	30.057	92	0.00	71	68	67
300	1020.0	70.1	67	232	5	12	11	30.12	1.1958	30.045	91	.01	71	69	66
400	1019.7	68.7	66	187	2	4	13	30.11	1.1988	30.037	92	0.00	69	68	66
500	1019.7	69.4	67	185	3	6	11	30.11	1.1970	30.036	93	0.00	70	69	66
600	1019.8	69.8	68	214	3	9	9	30.11	1.1959	30.038	93	0.00	71	69	67
700	1019.8	72.5	70	232	8	15	10	30.12	1.1894	30.041	91	0.00	73	71	69
800	1019.8	73.6	70	227	10	18	10	30.12	1.1869	30.041	90	0.00	74	73	70
900	1019.8	74.2	71	228	10	17	10	30.12	1.1853	30.040	89	0.00	74	74	71
1000	1019.6	75.6	72	219	11	17	11	30.11	1.1816	30.034	88	0.00	77	74	74
1100	1019.3	77.0	73	219	13	22	11	30.10	1.1780	30.025	87	0.00	78	77	75
1200	1019.0	77.6	73	221	13	23	10	30.09	1.1763	30.015	85	0.00	78	77	75
1300	1018.6	79.0	74	217	12	20	10	30.08	1.1726	30.005	84	0.00	80	78	77
1400	1018.1	77.6	73	216	10	19	12	30.07	1.1753	29.990	85	.16	79	75	75
1500	1017.3	76.3	73	217	8	17	13	30.04	1.1772	29.966	89	.12	78	74	74
1600	1017.5	72.3	70	240	8	21	13	30.05	1.1870	29.971	93	.52	74	71	71
1700	1017.5	71.8	70	243	6	11	8	30.05	1.1883	29.971	94	.01	72	71	71
1800	1017.8	73.0	71	237	4	6	9	30.06	1.1857	29.981	93	0.00	74	72	72
1900	1018.2	72.4	70	224	2	4	19	30.07	1.1876	29.991	94	0.00	73	71	70
2000	1018.6	70.9	69	254	1	2	22	30.08	1.1918	30.004	94	0.00	72	70	68
2100	1019.0	69.6	68	4	1	2	20	30.09	1.1955	30.016	95	0.00	71	69	67
2200	1019.2	69.1	68	234	1	4	30	30.10	1.1970	30.022	96	0.00	70	69	67
2300	1019.4	69.2	69	274	2	3	14	30.10	1.1956	30.027	96	0.00	70	69	67
2400	1019.6	69.6	69	302	1	3	21	30.11	1.1961	30.034	97	0.00	70	69	67
Min	1017.3	68.4	66		1	2	8	30.04	1.1726	29.966	84	0.00	69	68	65
Ave	1019.1	72.4	70	225	6	11	13	30.10	1.1888	30.019	91	.03	73	71	70
Max	1020.6	79.0	74		13	23	30	30.14	1.2006	30.064	97	.52	80	78	77
STD	.9	3.3	2		4	7	5	.03	.0084	.028	4	.11	3	3	4
Tot												.82			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 70
Latitude : 39.28 4 SEP 1992 Phillips Field
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1019.7	68.1	67	230	2	4	19	30.11	1.2000	30.038	97	0.00	69	67	66
200	1019.6	67.6	67	250	1	3	29	30.11	1.2010	30.034	97	0.00	68	67	65
300	1019.6	67.2	66	264	1	3	34	30.11	1.2020	30.033	98	0.00	67	67	65
400	1019.6	67.0	66	316	1	3	41	30.11	1.2024	30.032	98	0.00	67	67	65
500	1019.8	66.5	66		1	2	25	30.12	1.2040	30.041	98	0.00	67	66	64
600	1020.5	66.4	66	190	1	2	12	30.14	1.2050	30.060	99	0.00	67	66	64
700	1021.3	66.8	66	43	1	2	29	30.16	1.2049	30.082	99	0.00	68	66	65
800	1021.9	69.9	69	181	1	2	42	30.18	1.1979	30.100	99	0.00	72	68	69
900	1022.4	73.0	72	37	2	5	35	30.19	1.1906	30.117	98	0.00	75	72	74
1000	1023.1	76.9	73	23	3	7	28	30.21	1.1826	30.137	89	0.00	79	75	77
1100	1023.4	79.8	73	43	3	8	25	30.22	1.1765	30.147	80	0.00	82	78	81
1200	1023.4	82.5	74	76	2	6	37	30.22	1.1703	30.147	77	0.00	84	81	85
1300	1023.3	82.0	74	77	2	6	27	30.22	1.1715	30.144	76	0.00	84	81	82
1400	1023.0	83.2	74	118	2	5	33	30.21	1.1685	30.134	74	0.00	84	83	83
1500	1022.5	81.2	73	153	4	6	12	30.20	1.1724	30.120	77	0.00	82	81	79
1600	1022.2	83.1	74	160	1	4	36	30.19	1.1677	30.110	74	0.00	85	82	82
1700	1022.4	82.5	74	147	2	4	28	30.19	1.1693	30.115	76	0.00	85	81	80
1800	1022.6	80.2	74	153	2	4	16	30.20	1.1745	30.122	80	0.00	81	78	77
1900	1023.1	76.3	71		0	2	18	30.21	1.1842	30.136	85	0.00	78	74	73
2000	1023.6	73.0	70	14	1	2	17	30.23	1.1928	30.151	90	0.00	74	72	71
2100	1024.0	71.6	69	329	1	3	22	30.24	1.1965	30.162	92	0.00	72	71	69
2200	1024.2	70.8	69	70	2	3	16	30.25	1.1987	30.170	93	0.00	71	71	69
2300	1024.4	71.6	69	52	2	4	12	30.25	1.1970	30.176	92	0.00	72	71	69
2400	1024.5	70.9	68	33	2	6	14	30.26	1.1989	30.179	92	0.00	71	70	68
Min	1019.6	66.4	66		0	2	12	30.11	1.1677	30.032	74	0.00	67	66	64
Ave	1022.3	74.1	70	79	2	4	25	30.19	1.1887	30.112	89	0.00	75	73	73
Max	1024.5	83.2	74		4	8	42	30.26	1.2050	30.179	99	0.00	85	83	85
STD	1.6	6.3	3		1	2	9	.05	.0138	.049	9	0.00	7	6	7
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 5 SEP 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1024.7	73.6	71	69	5	10	15	30.26	1.1945	30.242	93	0.00	74	73	
200	1024.8	73.8	71	90	5	9	15	30.26	1.1942	30.244	92	0.00	74	74	
300	1025.0	73.6	71	102	4	9	16	30.27	1.1950	30.250	92	0.00	74	73	
400	1025.2	73.3	71	78	6	10	13	30.28	1.1960	30.258	92	0.00	74	73	
500	1025.6	72.8	70	67	6	11	13	30.29	1.1978	30.269	92	0.00	73	73	
600	1026.1	73.2	71	60	7	14	13	30.30	1.1973	30.283	92	0.00	74	73	
700	1026.5	73.5	71	64	8	13	11	30.31	1.1972	30.295	91	0.00	74	73	
800	1026.7	73.8	71	84	8	18	14	30.32	1.1966	30.300	90	0.00	74	73	
900	1027.2	74.5	71	72	7	12	12	30.33	1.1956	30.316	89	0.00	75	74	
1000	1027.3	74.7	71	71	7	14	13	30.34	1.1952	30.320	90	0.00	75	74	
1100	1027.4	75.5	72	87	6	11	15	30.34	1.1933	30.320	89	0.00	76	75	
1200	1027.3	76.8	73	86	5	9	15	30.34	1.1900	30.317	88	0.00	77	76	
1300	1026.8	77.3	73	83	6	12	14	30.32	1.1882	30.304	88	0.00	78	76	
1400	1026.6	76.2	73	81	8	13	13	30.31	1.1906	30.297	89	0.00	76	76	
1500	1026.5	75.7	72	82	8	14	13	30.31	1.1916	30.295	89	0.00	76	75	
1600	1026.1	74.8	72	87	8	15	15	30.30	1.1936	30.284	90	0.00	75	75	
1700	1026.4	74.7	71	107	7	14	15	30.31	1.1940	30.291	89	0.00	75	74	
1800	1026.8	74.0	70	90	7	13	16	30.32	1.1964	30.303	89	0.00	74	74	
1900	1027.1	73.6	70	90	7	14	15	30.33	1.1978	30.312	89	0.00	74	73	
2000	1027.7	73.0	69	90	8	16	16	30.35	1.2001	30.331	89	0.00	73	73	
2100	1028.3	70.2	68	90	8	16	15	30.36	1.2025	30.342	91	.15	73	69	
2200	1028.5	69.1	67	67	9	17	13	30.37	1.2105	30.353	93	0.00	69	69	
2300	1028.0	69.1	67	67	9	17	13	30.36	1.2100	30.340	92	0.00	69	69	
2400	1027.6	69.2	67	74	9	15	13	30.35	1.2093	30.328	91	0.00	69	69	
Min	1024.7	69.1	67		4	9	11	30.26	1.1882	30.242	88	0.00	69	69	
Ave	1026.7	73.6	71	80	7	13	14	30.32	1.1972	30.300	90	.01	74	73	
Max	1028.5	77.3	73		9	18	16	30.37	1.2105	30.353	93	.15	78	76	
STD	1.1	2.3	2		1	3	1	.03	.0062	.031	2	.03	2	2	
Tot												.15			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 6 SEP 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1027.5	69.1	66	72	9	16	13	30.34	1.2095	30.326	91	0.00	69	69	
200	1027.1	68.9	66	75	9	16	13	30.33	1.2093	30.311	92	0.00	69	69	
300	1026.8	68.9	66	74	8	14	13	30.32	1.2091	30.303	92	0.00	69	69	
400	1026.1	68.9	66	75	9	15	13	30.30	1.2082	30.284	92	0.00	69	69	
500	1026.1	69.0	67	74	9	15	13	30.30	1.2078	30.283	92	0.00	69	69	
600	1026.5	69.1	67	76	9	17	12	30.31	1.2081	30.295	91	0.00	69	69	
700	1026.9	69.3	67	75	10	18	12	30.32	1.2081	30.306	91	0.00	70	69	
800	1027.2	69.2	67	73	10	17	13	30.33	1.2088	30.314	91	0.00	70	69	
900	1027.4	68.9	66	67	11	19	12	30.34	1.2097	30.321	92	.02	69	69	
1000	1027.4	68.5	66	64	11	17	11	30.34	1.2108	30.323	92	.01	69	68	
1100	1027.3	68.6	66	65	9	17	12	30.34	1.2104	30.320	92	.01	69	68	
1200	1027.1	69.0	67	69	9	15	13	30.33	1.2092	30.314	92	.01	69	68	
1300	1027.0	68.7	66	92	8	17	15	30.33	1.2098	30.309	92	.06	69	68	
1400	1026.4	68.0	65	79	9	17	13	30.31	1.2108	30.292	92	.03	68	68	
1500	1026.1	68.3	66	84	8	17	14	30.30	1.2097	30.283	92	.04	69	68	
1600	1025.9	68.1	66	70	8	13	12	30.29	1.2099	30.276	92	.11	68	68	
1700	1025.5	68.7	66	67	8	14	12	30.28	1.2080	30.266	93	.04	69	68	
1800	1025.4	69.0	67	71	8	14	12	30.28	1.2071	30.264	92	.02	69	69	
1900	1025.4	69.2	67	76	7	12	13	30.28	1.2067	30.263	92	0.00	69	69	
2000	1025.6	69.3	67	77	7	12	13	30.29	1.2065	30.268	92	0.00	70	69	
2100	1025.9	69.5	67	76	6	12	14	30.29	1.2064	30.276	92	0.00	70	69	
2200	1025.7	69.7	67	77	5	12	14	30.29	1.2057	30.271	92	0.00	70	70	
2300	1025.5	69.7	67	67	6	11	13	30.28	1.2054	30.266	92	0.00	70	70	
2400	1025.3	69.5	67	61	6	10	13	30.28	1.2056	30.258	93	0.00	70	69	
Min	1025.3	68.0	65		5	10	11	30.28	1.2054	30.258	91	0.00	68	68	
Ave	1026.4	69.0	67	73	8	15	13	30.31	1.2084	30.291	92	.01	69	69	
Max	1027.5	69.7	67		11	19	15	30.34	1.2108	30.326	93	.11	70	70	
STD	.8	.4	0		2	3	1	.02	.0017	.022	0	.03	0	1	
Tot												.35			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 16
Latitude : 39.50 7 SEP 1992 Spesutie Island
Longitude : 76.07

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp Idx F
100	1025.1	69.6	67	58	6	10	13	30.27	1.2052	30.253	92	0.00	70	69	
200	1025.0	69.6	67	56	5	10	13	30.27	1.2050	30.249	92	0.00	70	69	
300	1024.5	69.7	67	63	6	9	12	30.25	1.2043	30.236	92	0.00	70	70	
400	1024.2	69.8	67	72	6	10	13	30.25	1.2037	30.227	92	0.00	70	70	
500	1024.6	70.0	68	63	5	8	12	30.26	1.2036	30.238	92	0.00	70	70	
600	1024.8	69.9	68	59	5	9	12	30.26	1.2041	30.246	92	.01	70	70	
700	1025.0	70.1	68	50	4	6	14	30.27	1.2038	30.252	92	0.00	70	70	
800	1025.1	70.3	68	38	4	7	14	30.27	1.2034	30.254	92	0.00	70	70	
900	1025.2	71.3	69	49	4	6	13	30.28	1.2012	30.258	92	0.00	72	70	
1000	1025.6	73.6	70	63	3	6	13	30.29	1.1959	30.269	90	0.00	75	72	
1100	1025.5	76.7	73	62	3	6	11	30.28	1.1880	30.264	88	0.00	78	75	
1200	1025.0	76.1	72	5	2	4	15	30.27	1.1890	30.250	88	0.00	77	76	
1300	1024.4	76.3	72	41	2	4	11	30.25	1.1880	30.234	88	0.00	77	76	
1400	1023.9	76.2	72	96	2	5	13	30.24	1.1876	30.219	88	0.00	77	76	
1500	1023.3	76.6	73	90	3	6	13	30.22	1.1859	30.201	88	0.00	78	76	
1600	1023.0	76.1	72	55	2	4	13	30.21	1.1866	30.192	88	0.00	77	75	
1700	1023.0	75.2	72	55	2	6	12	30.21	1.1888	30.191	90	0.00	75	75	
1800	1022.9	75.1	72	86	4	7	12	30.21	1.1890	30.189	90	0.00	75	75	
1900	1023.0	74.4	71	91	4	7	13	30.21	1.1909	30.193	90	0.00	75	74	
2000	1023.3	73.4	70	100	4	8	13	30.22	1.1936	30.199	90	0.00	74	73	
2100	1023.6	72.9	70	92	3	7	15	30.23	1.1951	30.209	91	0.00	73	73	
2200	1023.7	72.5	70	113	3	7	13	30.23	1.1962	30.211	91	0.00	73	72	
2300	1023.3	72.0	69	132	4	8	12	30.22	1.1971	30.201	91	0.00	72	72	
2400	1022.9	71.7	69	144	4	7	12	30.21	1.1972	30.189	92	0.00	72	72	
Min	1022.9	69.6	67		2	4	11	30.21	1.1859	30.189	88	0.00	70	69	
Ave	1024.2	72.9	70	72	4	7	13	30.24	1.1960	30.226	91	.00	73	72	
Max	1025.6	76.7	73		6	10	15	30.29	1.2052	30.269	92	.01	78	76	
STD	.9	2.7	2		1	2	1	.03	.0020	.027	2	.00	3	2	
Tot												.01			

SKY CONDITION RECORD

SPESUTIE ISLAND OBSERVATION SITE

Times listed are real time – no corrections are necessary

DATE	TIME	SKY CONDITION (x 100 = Height in feet)	VISIBILITY (Miles)	TOTAL SKY COVER 1/10's	TOTAL OPAQUE
31 Aug 92	0800	E120⊕200⊕	7	9	9
	0900	100⊕E120⊕200⊕	8	9	8
	1000	100⊕E120⊕200⊕	10	9	8
	1100	120⊕200⊕	10	5	3
	1200	120⊕200⊕	10	5	3
	1300	25⊕100⊕E250⊕	10	7	4
	1400	20⊕ 250-⊕	10	4	2
	1500	250-⊕	10	2	1
	1600	250-⊕	10	2	0
01 Sep 92	0800	○	10	0	0
	0900	○	10	0	0
	1000	○	10	0	0
	1100	○	10	0	0
	1200	○	10	0	0
	1300	40⊕	10	4	4
	1400	40⊕	10	4	4
	1500	40⊕	10	4	4
	1600	40⊕	10	5	5
02 Sep 92	0800	50⊕	8	5	5
	0900	50⊕	8	10	10
	1000	50⊕	8	10	10
	1100	50⊕	8	10	10
	1200	50⊕	8	10	10
	1300	50⊕	8	10	10
	1400	50⊕	8	10	10
	1500	30⊕60⊕100⊕	8	10	10
	1600	30⊕60⊕100⊕	7	10	10
03 Sep 92	0800	15⊕130⊕	4FH	10	10
	0900	15⊕130⊕	4FH	10	10
	1000	8⊕15⊕130⊕	4FH	10	10
	1100	15⊕130⊕	4FH	10	10
	1200	20⊕130⊕230⊕	5H	10	10
	1300	25⊕130⊕	5H	10	10
	1400	25⊕130⊕	5H	10	10
	1500	25⊕130⊕	5TRW-H	10	10
	1600	25⊕130⊕	4RW-H	10	10
04 Sep 92	0800	-X100⊕240⊕	2FH	10	9
	0900	-X100⊕240⊕	2½FH	10	10
	1000	-X100⊕240⊕	3FH	10	9
	1100	100⊕240⊕	4HF	10	8
	1200	130⊕100⊕240-⊕	4H	8	4
	1300	180⊕240-⊕	4H	10	5
	1400	180⊕240-⊕	4H	10	5
	1500	250⊕240-⊕	4H	10	5
	1600	250⊕240-⊕	4H	10	5

KEY

GF= Ground Fog
F= Fog
H= Haze
K= Smoke
BS= Blowing Snow
BN= Blowing Sand
BD= Blowing Dust
IF= Ice Fog
D= Dust
BY= Blowing Spray

****

T= Thunderstorm
T+= Severe Thunderstorm
R= Rain
RW= Rainshower
L= Drizzle
ZR= Freezing Rain
ZL= Freezing Drizzle
IP= Ice Pellets (Sleet)
IPW=Ice Pellet Shower
S= Snow
SW= Snow Shower
SP= Snow Pellets
SG= Snow Grains
IC= Ice Crystals
A= Hail

****

Intensity of precip.:
- = Light
+ = Heavy
No symbol = Moderate

****

Sky Condition:
○= Clear = less than 1/10
⊖= Scattered = 1/10-5/10
⊜= Broken = 6/10-9/10
⊕= Overcast = 10/10 of sky is covered.

NOTE: A layer of clouds is considered to be thin if ½ or more of it is transparent; the sky condition symbol will be preceded by a (-) in such cases.
Visibilities of 7 or more miles are classified as unrestricted.
(- X) = sky partially obscured by surface based phenomena
(W 2) = sky completely obscured; vertical visibility is 200 feet

ROUTING AND TRANSMITTAL SLIP Date 21 Jun 93

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. ~~Denver Miser~~ Craig Heimbach		
2. STECS-NE, Bldg. 860		
3. APG/AA		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
X	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

Daily Meteorological Summaries for the period:

14 thru 20 Jun 93

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
TECOM Meteorological Team (APG) AMSTE-TC-AM (AB) APG/AA	200 B 1134 Phone No. 3-5624/7908

5041-102

GPO : 1987 0 - 192-783

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 55
Latitude : 39.28 14 JUN 1993 PHILLIPS FIELD
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp F
100	1023.1	55.2	52	343	0	2	11	30.21	1.2380	30.152	89	0.00	57	54	54
200	1023.0	55.1	52		1	2	12	30.21	1.2383	30.148	89	0.00	57	54	54
300	1022.6	53.6	51	350	1	2	18	30.20	1.2415	30.137	91	0.00	54	53	53
400	1022.4	52.5	50		0	2	23	30.19	1.2441	30.132	92	0.00	53	52	51
500	1022.8	52.0	50		1	2	18	30.20	1.2457	30.144	92	0.00	53	52	51
600	1023.1	54.0	52	335	1	2	37	30.21	1.2411	30.152	92	0.00	58	52	55
700	1023.4	63.3	59	114	1	2	32	30.22	1.2177	30.160	87	0.00	68	58	66
800	1023.5	70.1	61	190	1	3	33	30.22	1.2019	30.163	73	0.00	72	68	71
900	1023.1	72.9	62	142	2	6	42	30.21	1.1952	30.154	68	0.00	74	72	74
1000	1022.8	74.4	63	146	3	8	36	30.20	1.1910	30.145	67	0.00	75	74	76
1100	1022.1	75.3	57	91	6	11	22	30.18	1.1895	30.124	54	0.00	76	75	76
1200	1021.6	76.4	55	103	5	11	23	30.17	1.1868	30.108	48	0.00	78	75	77
1300	1021.3	78.7	56	137	5	10	26	30.16	1.1812	30.098	46	0.00	80	78	79
1400	1020.9	80.2	53	155	5	12	26	30.15	1.1781	30.086	39	0.00	81	80	79
1500	1020.4	80.3	54	215	5	11	35	30.13	1.1771	30.072	40	0.00	81	79	79
1600	1020.0	79.3	54	251	6	14	16	30.12	1.1787	30.060	41	0.00	80	79	78
1700	1019.7	79.4	51	258	6	11	13	30.11	1.1787	30.052	37	0.00	80	79	77
1800	1019.3	79.5	49	240	5	9	15	30.10	1.1784	30.039	35	0.00	80	79	76
1900	1019.1	77.2	52	232	4	7	9	30.10	1.1828	30.035	41	0.00	79	74	74
2000	1019.0	71.5	58	227	5	9	6	30.09	1.1942	30.032	63	0.00	74	70	69
2100	1019.1	68.6	62	211	3	6	10	30.09	1.1998	30.034	80	0.00	70	68	67
2200	1019.3	68.5	63	232	5	8	7	30.10	1.2002	30.042	82	0.00	69	68	66
2300	1019.0	68.9	63	230	6	11	7	30.09	1.1988	30.031	82	0.00	69	68	67
2400	1018.7	68.4	63	218	5	10	8	30.08	1.1996	30.024	84	0.00	69	68	66
Min	1018.7	52.0	49		0	2	6	30.08	1.1771	30.024	35	0.00	53	52	51
Ave	1021.2	69.0	56	209	3	7	20	30.16	1.2033	30.097	67	0.00	70	68	68
Max	1023.5	80.3	63		6	14	42	30.22	1.2457	30.163	92	0.00	81	80	79
STD	1.7	10.1	5		2	4	11	.05	.0246	.051	21	0.00	10	10	10
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 55
Latitude : 39.28 15 JUN 1993 PHILLIPS FIELD
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp F
100	1018.7	67.1	62	198	3	6	10	30.08	1.2028	30.023	85	0.00	68	66	65
200	1018.3	65.6	62	175	4	8	8	30.07	1.2060	30.010	87	0.00	66	65	64
300	1017.9	64.5	61	171	2	4	20	30.06	1.2084	30.001	88	0.00	65	63	63
400	1017.7	64.2	61	197	2	5	13	30.05	1.2086	29.993	89	0.00	65	63	63
500	1017.7	65.0	62	249	2	6	27	30.05	1.2065	29.993	89	0.00	65	65	64
600	1018.1	66.1	63	256	2	4	28	30.07	1.2045	30.007	89	0.00	67	65	65
700	1018.3	67.9	64	212	2	5	18	30.07	1.2001	30.013	88	0.00	70	67	68
800	1018.4	71.2	66	235	6	12	13	30.07	1.1923	30.014	84	0.00	72	70	71
900	1018.4	72.7	66	234	7	12	12	30.07	1.1890	30.015	81	0.00	73	72	73
1000	1018.2	73.7	67	224	8	13	12	30.07	1.1863	30.009	80	0.00	74	73	74
1100	1017.9	76.2	68	236	10	17	14	30.06	1.1802	30.000	76	0.00	78	74	77
1200	1017.3	78.1	68	224	11	16	12	30.04	1.1753	29.983	72	0.00	79	78	78
1300	1016.7	79.1	66	219	12	18	10	30.03	1.1728	29.965	64	0.00	80	78	78
1400	1016.4	80.0	64	219	12	18	12	30.02	1.1710	29.956	58	0.00	81	80	79
1500	1016.5	80.1	64	228	11	17	11	30.02	1.1710	29.958	58	0.00	81	79	78
1600	1016.2	79.3	64	218	10	17	10	30.01	1.1724	29.950	59	0.00	80	79	77
1700	1015.9	79.8	64	216	10	18	10	30.00	1.1709	29.939	58	0.00	81	79	77
1800	1015.8	78.6	64	216	8	14	10	30.00	1.1733	29.936	61	0.00	80	77	75
1900	1015.8	77.3	64	221	8	13	9	30.00	1.1761	29.936	64	0.00	78	77	74
2000	1015.9	75.3	65	225	7	12	8	30.00	1.1805	29.942	71	0.00	77	75	72
2100	1016.5	74.0	68	230	8	14	8	30.02	1.1834	29.958	80	0.00	75	74	72
2200	1017.1	73.0	67	242	5	9	9	30.03	1.1863	29.975	83	0.00	74	73	71
2300	1017.4	72.5	67	251	5	9	9	30.04	1.1879	29.984	83	0.00	73	72	70
2400	1017.6	71.9	67	255	6	11	7	30.05	1.1896	29.992	84	0.00	72	72	70
Min	1015.8	64.2	61		2	4	7	30.00	1.1709	29.936	58	0.00	65	63	63
Ave	1017.3	73.0	65	225	7	12	12	30.04	1.1873	29.981	76	0.00	74	72	72
Max	1018.7	80.1	68		12	18	28	30.08	1.2086	30.023	89	0.00	81	80	79
STD	1.0	5.5	2		3	5	6	.03	.0134	.028	11	0.00	6	6	5
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 55
Latitude : 39.28 16 JUN 1993 PHILLIPS FIELD
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp F
100	1017.8	71.8	67	251	6	9	7	30.06	1.1900	29.996	85	0.00	72	70	70
200	1018.1	69.3	66	325	2	4	11	30.07	1.1962	30.005	88	0.00	70	69	69
300	1018.2	68.3	65	327	2	5	18	30.07	1.1989	30.010	89	0.00	69	68	67
400	1018.8	66.7	63	10	2	7	15	30.09	1.2038	30.027	87	0.00	68	66	65
500	1019.3	66.2	61	35	2	4	14	30.10	1.2058	30.042	84	0.00	67	66	64
600	1020.1	66.9	61	46	2	5	15	30.12	1.2052	30.064	82	0.00	69	65	66
700	1021.1	70.9	63	30	3	8	22	30.15	1.1967	30.094	77	0.00	72	70	71
800	1021.6	72.7	62	32	5	10	17	30.17	1.1937	30.108	69	0.00	74	72	73
900	1021.9	75.3	61	17	4	10	24	30.18	1.1884	30.117	61	0.00	76	74	75
1000	1021.8	76.6	59	7	5	12	28	30.18	1.1858	30.116	55	0.00	78	76	77
1100	1022.0	78.0	57	352	4	10	31	30.18	1.1835	30.122	48	0.00	80	77	78
1200	1022.3	79.6	55	332	4	11	33	30.19	1.1806	30.128	43	0.00	80	79	79
1300	1021.6	80.5	53	354	4	10	37	30.17	1.1782	30.110	39	0.00	81	80	80
1400	1021.0	81.7	52	346	4	10	35	30.15	1.1751	30.090	36	0.00	82	81	82
1500	1021.0	82.6	51	333	3	10	38	30.15	1.1733	30.090	34	0.00	84	82	83
1600	1020.9	83.6	51	305	3	9	39	30.15	1.1711	30.088	33	0.00	85	83	83
1700	1020.9	83.4	53	196	4	12	32	30.15	1.1711	30.089	35	0.00	85	82	81
1800	1021.1	81.6	53	174	4	7	12	30.15	1.1751	30.094	37	0.00	82	81	78
1900	1021.6	80.0	54	205	2	5	12	30.17	1.1791	30.110	40	0.00	82	77	76
2000	1021.8	72.9	57	238	1	3	16	30.17	1.1947	30.114	57	0.00	77	70	70
2100	1022.0	67.2	59	333	1	2	13	30.18	1.2073	30.122	76	0.00	70	65	66
2200	1022.5	63.9	58		0	2	6	30.19	1.2157	30.134	82	0.00	65	63	63
2300	1022.5	62.5	58		0	2	9	30.19	1.2190	30.134	84	0.00	63	62	61
2400	1022.5	60.5	57		1	2	23	30.19	1.2238	30.134	87	0.00	62	60	59
Min	1017.8	60.5	51		0	2	6	30.06	1.1711	29.996	33	0.00	62	60	59
Ave	1020.9	73.4	58	345	3	7	21	30.15	1.1922	30.089	63	0.00	75	72	72
Max	1022.5	83.6	67		6	12	39	30.19	1.2238	30.134	89	0.00	85	83	83
STD	1.5	7.2	5		2	3	10	.04	.0155	.043	22	0.00	7	7	7
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 55
Latitude : 39.28
Longitude : 76.10

17 JUN 1993

PHILLIPS FIELD

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp F
100	1022.4	59.1	56	353	1	2	13	30.19	1.2272	30.132	89	0.00	60	58	58
200	1022.4	58.3	55		0	1	8	30.19	1.2293	30.131	89	0.00	59	58	57
300	1022.4	57.6	55	44	1	2	10	30.19	1.2310	30.131	90	0.00	58	57	56
400	1022.6	56.8	54	4	1	3	27	30.20	1.2333	30.137	90	0.00	57	56	56
500	1023.2	56.3	54	24	1	4	22	30.22	1.2352	30.155	91	0.00	57	56	55
600	1023.9	58.8	56	318	1	2	25	30.24	1.2298	30.177	89	0.00	62	56	59
700	1024.6	66.8	61	57	2	6	13	30.26	1.2108	30.196	81	0.00	70	62	68
800	1024.9	71.4	62	70	5	9	11	30.27	1.2004	30.205	73	0.00	73	69	71
900	1025.1	75.5	62	90	4	7	16	30.27	1.1914	30.210	64	0.00	77	73	75
1000	1025.1	78.9	62	111	3	7	25	30.27	1.1840	30.210	56	0.00	80	78	78
1100	1024.9	82.6	60	163	2	8	41	30.27	1.1762	30.205	46	0.00	84	80	83
1200	1024.5	83.9	56	147	4	10	31	30.26	1.1735	30.195	39	0.00	85	83	82
1300	1024.0	84.4	55	172	4	10	28	30.24	1.1723	30.180	37	0.00	85	84	82
1400	1023.8	85.6	54	202	4	11	33	30.23	1.1697	30.172	34	0.00	87	85	84
1500	1023.5	86.3	55	226	4	9	35	30.22	1.1676	30.163	34	0.00	87	86	85
1600	1023.0	86.8	55	229	4	9	27	30.21	1.1659	30.150	34	0.00	88	86	86
1700	1022.7	86.2	55	220	4	9	21	30.20	1.1666	30.141	35	0.00	87	85	84
1800	1022.3	84.4	56	229	4	8	13	30.19	1.1701	30.131	37	0.00	85	84	81
1900	1022.2	81.6	57	230	2	5	14	30.19	1.1759	30.127	43	0.00	84	79	78
2000	1022.2	75.2	60	353	1	2	22	30.19	1.1893	30.128	59	0.00	79	73	73
2100	1022.6	70.9	61	38	1	6	24	30.20	1.1990	30.138	72	0.00	73	69	70
2200	1022.8	70.4	64	141	2	7	14	30.20	1.1998	30.144	79	0.00	71	70	69
2300	1022.7	71.5	65	187	2	6	9	30.20	1.1969	30.140	79	0.00	72	71	69
2400	1022.5	70.4	64	188	2	6	8	30.19	1.1994	30.134	81	0.00	71	70	68
Min	1022.2	56.3	54		0	1	8	30.19	1.1659	30.127	34	0.00	57	56	55
Ave	1023.3	73.3	58	170	3	6	20	30.22	1.1956	30.160	63	0.00	75	72	72
Max	1025.1	86.8	65		5	11	41	30.27	1.2352	30.210	91	0.00	88	86	86
STD	1.0	10.9	4		2	3	9	.03	.0244	030	22	0.00	11	11	11
Tot												0.00			

APG Surface Observations EST [Add one hour for EDT]

SAMS Hourly Summarized Data Report

Elevation(ft): 55
Latitude : 39.28 18 JUN 1993 PHILLIPS FIELD
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp F
100	1022.6	67.5	63	317	1	2	9	30.20	1.2063	30.138	85	0.00	70	66	66
200	1022.7	65.2	62	356	1	2	22	30.20	1.2122	30.140	89	0.00	66	65	65
300	1022.6	64.4	61	29	1	2	21	30.20	1.2138	30.138	90	0.00	65	64	64
400	1022.6	64.7	62	16	1	2	15	30.20	1.2131	30.139	90	0.00	65	64	64
500	1022.7	65.6	63	60	0	2	6	30.20	1.2108	30.140	91	0.00	66	65	65
600	1022.8	67.2	65		0	2	13	30.20	1.2069	30.145	91	0.00	69	66	67
700	1022.9	71.5	68	20	1	2	23	30.21	1.1965	30.148	88	0.00	75	69	73
800	1023.0	77.1	71	306	1	5	36	30.21	1.1832	30.151	82	0.00	78	75	78
900	1022.9	79.9	72	238	5	9	18	30.21	1.1765	30.147	78	0.00	82	78	81
1000	1022.5	82.3	73	243	4	8	22	30.20	1.1706	30.135	75	0.00	84	81	83
1100	1022.3	85.7	75	256	3	8	30	30.19	1.1626	30.128	71	0.00	87	84	88
1200	1021.6	88.5	75	27	3	10	39	30.17	1.1560	30.110	64	0.00	90	87	90
1300	1021.0	87.5	75	150	6	10	18	30.15	1.1570	30.090	67	0.00	88	86	88
1400	1020.4	87.5	74	158	6	11	14	30.13	1.1569	30.072	65	0.00	89	86	87
1500	1019.8	90.2	71	222	7	14	18	30.12	1.1515	30.057	54	0.00	91	89	88
1600	1019.4	90.2	67	229	8	12	12	30.10	1.1519	30.043	47	0.00	91	89	87
1700	1019.0	89.5	67	231	8	11	10	30.09	1.1530	30.031	48	0.00	90	89	86
1800	1018.7	88.4	69	231	6	10	10	30.08	1.1546	30.022	52	0.00	89	87	85
1900	1018.5	85.1	70	234	6	10	9	30.08	1.1610	30.018	60	0.00	87	83	81
2000	1018.5	80.8	69	231	3	6	5	30.08	1.1704	30.018	67	0.00	82	79	78
2100	1018.8	77.9	70	274	2	5	14	30.09	1.1767	30.027	77	0.00	79	77	76
2200	1019.1	76.8	71	275	2	4	7	30.09	1.1793	30.034	83	0.00	77	76	75
2300	1018.7	74.7	70	288	1	2	16	30.09	1.1840	30.025	86	0.00	76	74	74
2400	1018.5	73.0	69	277	1	3	17	30.08	1.1875	30.018	87	0.00	74	72	72
Min	1018.5	64.4	61		0	2	5	30.08	1.1515	30.018	47	0.00	65	64	64
Ave	1020.9	78.4	69	229	3	6	17	30.15	1.1788	30.088	75	0.00	80	77	78
Max	1023.0	90.2	75		8	14	39	30.21	1.2138	30.151	91	0.00	91	89	90
STD	1.8	9.2	4		3	4	9	.05	.0223	.054	14	0.00	9	9	9
Tot												0.00			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 55
Latitude : 39.28 19 JUN 1993 PHILLIPS FIELD
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp F
100	1018.3	73.9	70	279	3	3	4	30.07	1.1851	30.011	87	0.00	74	73	73
200	1018.0	73.4	69	287	2	3	10	30.06	1.1860	30.002	86	0.00	74	73	72
300	1017.8	72.2	68	285	2	3	9	30.06	1.1889	29.998	87	0.00	73	71	71
400	1017.9	71.7	68	282	2	3	6	30.06	1.1901	30.000	87	0.00	72	71	71
500	1018.0	71.0	67	296	1	3	12	30.06	1.1921	30.003	87	0.00	72	70	70
600	1018.4	71.7	68	295	1	3	10	30.07	1.1907	30.013	88	0.00	74	70	71
700	1018.7	76.4	71	281	2	4	11	30.08	1.1797	30.022	82	0.00	79	74	77
800	1018.9	81.5	73	288	3	6	13	30.09	1.1683	30.030	76	0.00	84	79	81
900	1019.3	84.3	74	291	5	11	12	30.10	1.1625	30.041	71	0.00	86	83	83
1000	1019.1	88.0	73	314	4	11	26	30.10	1.1548	30.037	61	0.00	90	86	87
1100	1019.1	90.1	72	316	4	10	26	30.10	1.1506	30.037	55	0.00	91	89	89
1200	1018.9	91.6	72	297	4	11	28	30.09	1.1471	30.029	53	0.00	93	91	91
1300	1018.3	92.5	71	308	4	9	34	30.07	1.1449	30.011	49	0.00	94	92	92
1400	1017.7	93.5	71	277	4	11	27	30.05	1.1423	29.995	48	0.00	94	92	92
1500	1017.3	91.5	70	254	5	9	24	30.04	1.1461	29.983	50	0.00	93	90	88
1600	1017.0	92.7	72	221	4	10	23	30.03	1.1427	29.974	51	0.00	94	91	91
1700	1017.0	90.4	71	40	3	10	19	30.03	1.1480	29.973	52	0.00	94	87	89
1800	1018.4	80.1	69	13	7	35	16	30.07	1.1719	30.014	71	.01	87	71	80
1900	1018.7	71.8	67	73	5	11	15	30.08	1.1910	30.023	86	.01	72	71	73
2000	1018.5	72.6	68	249	3	8	25	30.08	1.1888	30.018	86	0.00	73	72	73
2100	1019.0	72.0	67	280	3	6	21	30.09	1.1909	30.032	85	0.00	73	71	71
2200	1019.5	70.3	66	282	1	4	17	30.11	1.1955	30.048	87	0.00	71	70	70
2300	1019.9	71.5	67	287	3	7	24	30.12	1.1930	30.059	87	0.00	73	70	71
2400	1019.3	71.1	67	343	1	3	24	30.10	1.1934	30.042	86	0.00	72	70	70
Min	1017.0	70.3	66		1	3	4	30.03	1.1423	29.973	48	0.00	71	70	70
Ave	1018.5	79.8	70	300	3	8	18	30.08	1.1727	30.016	73	.00	81	78	79
Max	1019.9	93.5	74		7	35	34	30.12	1.1955	30.059	88	.01	94	92	92
STD	.8	9.0	2		2	7	8	.02	.0202	.023	16	.00	9	9	9
Tot												.02			

APG Surface Observations EST (Add one hour for EDT)

SAMS Hourly Summarized Data Report

Elevation(ft): 55
Latitude : 39.28 20 JUN 1993 PHILLIPS FIELD
Longitude : 76.10

Time hhmm	Sea Lv Press mb	Air Temp F	Dw Pt F	Ave WD deg	Av WS kt	Pk Wnd Spd kt	STD Wnd Dir deg	Altim -eter in Hg	Dens- ity kg/m3	Sta. Press. in Hg	RH %	Pre- cip in	Max Tmp F	Min Tmp F	WBG Tmp F
100	1019.1	69.8	66	51	1	4	20	30.10	1.1964	30.035	88	0.00	70	69	69
200	1018.9	69.8	66	44	1	3	25	30.09	1.1960	30.031	88	0.00	70	70	69
300	1019.2	70.0	66	343	1	3	44	30.10	1.1958	30.038	88	0.00	70	70	69
400	1019.3	69.3	66		1	2	25	30.10	1.1977	30.042	89	0.00	70	69	69
500	1019.4	68.3	65	49	1	3	25	30.10	1.2002	30.044	89	0.00	69	68	68
600	1019.8	69.4	66	11	2	5	14	30.12	1.1979	30.056	90	0.00	71	68	70
700	1020.0	72.9	69	61	3	6	11	30.12	1.1896	30.063	88	0.00	75	71	74
800	1020.2	76.2	71	75	5	7	13	30.13	1.1819	30.067	83	0.00	78	75	78
900	1020.2	79.9	73	74	3	8	22	30.13	1.1734	30.067	79	0.00	81	78	82
1000	1020.0	82.4	74	73	3	7	26	30.12	1.1673	30.060	76	0.00	84	81	85
1100	1019.8	85.5	76	125	3	9	27	30.12	1.1599	30.057	74	0.00	86	84	88
1200	1019.6	87.2	77	164	3	8	30	30.11	1.1557	30.051	73	0.00	89	86	89
1300	1019.1	89.2	76	197	4	10	30	30.09	1.1513	30.034	65	0.00	90	88	90
1400	1018.4	89.5	76	194	5	10	24	30.07	1.1497	30.014	65	0.00	90	89	90
1500	1017.7	89.9	77	208	5	11	26	30.05	1.1480	29.995	65	0.00	90	89	90
1600	1016.9	89.7	77	236	7	12	17	30.03	1.1476	29.972	66	0.00	90	88	89
1700	1016.9	87.9	77	236	6	10	12	30.03	1.1511	29.970	70	0.00	88	88	87
1800	1016.6	85.7	76	238	5	10	11	30.02	1.1557	29.962	74	0.00	87	85	84
1900	1017.6	82.5	74	287	6	19	14	30.05	1.1643	29.990	76	0.00	85	79	80
2000	1017.7	74.8	69	311	3	11	36	30.05	1.1829	29.993	82	.05	79	72	74
2100	1017.8	71.8	67	58	4	7	13	30.06	1.1900	29.996	86	0.00	72	71	72
2200	1018.5	71.6	67	332	4	20	25	30.08	1.1912	30.017	85	.07	72	71	71
2300	1018.3	70.7	66	4	3	9	18	30.07	1.1933	30.010	86	.12	72	70	70
2400	1017.4	70.2	66	129	1	3	39	30.05	1.1933	29.985	88	0.00	70	70	70
Min	1016.6	68.3	65		1	2	11	30.02	1.1476	29.962	65	0.00	69	68	68
Ave	1018.7	78.1	71	205	3	8	23	30.08	1.1762	30.023	80	.01	79	77	78
Max	1020.2	89.9	77		7	20	44	30.13	1.2002	30.067	90	.12	90	89	90
STD	1.1	8.2	5		2	5	9	.03	.0196	.033	9	.03	8	8	9
Tot												.24			

SPESUTIE ISLAND OBSERVATION SITE

Times listed are real time – no corrections are necessary

DATE 1993	TIME	SKY CONDITION (x 100 = Height in feet)	VISIBILITY (Miles)	TOTAL SKY COVER 1/10's	TOTAL OPAQUE
14 June	0800	○	10	0	0
	0900	○	10	0	0
	1000	○	10	0	0
	1100	250-◑	10	1	0
	1200	250-◑	10	1	0
	1300	○	10	0	0
	1400	○	10	0	0
	1500	○	10	0	0
	1600	○	10	0	0
15 June	0800	80 150 250 ⊕	8	10	9
	0900	80 150 250 ⊕	10	10	9
	1000	150 250 ⊕	10	10	8
	1100	150 250 ⊕	8	10	8
	1200	150 250-◑	8	4	2
	1300	200 250-◑	10	3	1
	1400	250 250-◑	10	3	1
	1500	300 250 ◑	10	3	2
	1600	300 250 ◑	10	3	2
16 June	0800	○	10	0	0
	0900	○	10	0	0
	1000	250-◑	10	2	1
	1100	250-◑	10	7	3
	1200	250-◑	10	9	4
	1300	250-◑	10	9	3
	1400	250-◑	10	6	3
	1500	250-◑	10	3	0
	1600	○	10	0	0
17 June	0800	250-◑	8	3	
	0900	250-◑	10	7	
	1000	250-◑	10	8	
	1100	250-◑	10	7	
	1200	250-◑	10	7	
	1300	250-⊕	10	10	
	1400	250-◑	10	9	
	1500	250-◑	10	9	
	1600	250-◑	10	7	
18 June	0800	-X250-◑	3FH	8	3
	0900	-X250-◑	4HF	7	2
	1000	450 250-◑	4H	4	2
	1100	450 250-◑	4H	3	1
	1200	450	4H	3	3
	1300	○	4H	0	0
	1400	○	4H	0	0
	1500	○	4H	0	0
	1600	○	4H	0	0

KEY

GF= Ground Fog
F= Fog
H= Haze
K= Smoke
BS= Blowing Snow
BN= Blowing Sand
BD= Blowing Dust
IF= Ice Fog
D= Dust
BY= Blowing Spray

****

T= Thunderstorm
T+= Severe Thunderstorm
R= Rain
RW= Rainshower
L= Drizzle
ZR= Freezing Rain
ZL= Freezing Drizzle
IP= Ice Pellets (Sleet)
IPW=Ice Pellet Shower
S= Snow
SW= Snow Shower
SP= Snow Pellets
SG= Snow Grains
IC= Ice Crystals
A= Hail

****

Intensity of precip.:
– = Light
+ = Heavy
No symbol = Moderate

****

Sky Condition:
○= Clear = less than 1/10
◑= Scattered = 1/10–5/10
◍= Broken = 6/10–9/10
⊕= Overcast = 10/10 of sky is covered.

NOTE: A layer of clouds is considered to be thin if ½ or more of it is transparent; the sky condition symbol will be preceded by a (–) in such cases.
Visibilities of 7 or more miles are classified as unrestricted.
(– X) = sky partially obscured by surface based phenomena
(W 2 X) = sky completely obscured; vertical visibility is 200 feet

Aberdeen Meteorological Network

DCP7 Latitude: 39.45 Longitude: 76.17 Elevation: 16.8 M Phillips Air Field

Time(EST) +1 hr (EDT)	Wind Direct (°)	Wind Speed (Mph)	Std Dev WD (°)	Peak Wind Speed (Mph)	Air Temp (°F)	Dew Point (°F)	Rel Humd (%)	Press (Ins)	Density (Kg/m3)	Total Precip (Inch)	WBGT (°F)
Wednesday, July 05, 1995											
1:00	20	2.1	55	4.3	70.4	70.3	100	30.13	1.1954	0.00	69.4
2:00	70	1.5	66	3.4	70.4	70.3	100	30.13	1.1954	0.00	69.3
3:00	41	1.9	14	3.9	70.7	70.7	100	30.13	1.1950	0.00	69.6
4:00	99	1.4	38	3.1	71.2	71.2	100	30.13	1.1936	0.00	70.3
5:00	139	1.7	21	5.7	71.6	71.6	100	30.14	1.1930	0.00	70.7
6:00	141	2.0	20	5.3	71.9	72.0	100	30.14	1.1920	0.00	71.2
7:00	144	2.4	37	5.2	72.9	72.9	100	30.15	1.1894	0.00	72.7
8:00	191	3.3	19	6.4	74.1	74.1	100	30.17	1.1869	0.00	73.9
9:00	157	3.0	41	9.1	76.7	76.1	98	30.17	1.1805	0.00	78.4
10:00	164	5.9	19	9.7	79.4	77.5	94	30.16	1.1736	0.00	79.9
11:00	204	7.0	24	10.7	80.1	77.5	92	30.18	1.1726	0.00	79.5
12:00	206	6.3	20	11.3	81.8	79.0	91	30.17	1.1683	0.00	82.0
13:00	214	7.8	18	13.5	84.0	79.7	87	30.16	1.1628	0.00	83.5
14:00	200	8.2	21	13.5	84.5	79.9	86	30.15	1.1606	0.00	83.5
15:00	212	8.0	19	12.0	84.1	79.9	87	30.15	1.1617	0.00	82.4
16:00	212	8.4	13	12.8	84.1	79.5	86	30.13	1.1614	0.00	82.4
17:00	215	7.3	16	11.1	84.6	79.9	86	30.12	1.1597	0.00	82.4
18:00	214	6.8	10	11.4	82.9	78.3	86	30.12	1.1641	0.00	79.5
19:00	211	4.5	9	7.5	81.3	77.7	89	30.12	1.1675	0.00	78.3
20:00	223	3.8	15	7.1	79.3	76.8	92	30.12	1.1724	0.00	75.9
21:00	186	1.9	19	3.9	76.2	74.8	96	30.12	1.1803	0.00	73.6
22:00	164	2.2	25	5.0	74.2	73.2	97	30.12	1.1855	0.00	72.0
23:00	192	4.1	17	7.5	74.2	72.3	94	30.13	1.1863	0.00	70.5
24:00	176	4.3	13	7.1	73.7	71.8	94	30.13	1.1877	0.00	70.2
Average		4.4		7.9	77.3	75.3	94	30.14	1.1786		75.9
Maximum		8.4		13.5	84.6	79.9	100	30.18	1.1954		83.5
Minimum		1.4		3.1	70.4	70.3	86	30.12	1.1597		69.3
Total										0.00	

Report created on: 10-Jul-95 Number of records 125 Page No. 1

Aberdeen Meteorological Network

DCP7 Latitude: 39.45 Longitude: 76.17 Elevation: 16.8 M Phillips Air Field

Time(EST) +1 hr (EDT)	Wind Direct (°)	Wind Speed (Mph)	Std Dev WD (°)	Peak Wind Speed (Mph)	Air Temp (°F)	Dew Point (°F)	Rel Humd (%)	Press (Ins)	Density (Kg/m3)	Total Precip (Inch)	WBGT (°F)
Thursday, July 06, 1995											
1:00	177	3.0	13	6.1	72.6	71.4	96	30.13	1.1902	0.00	70.0
2:00	156	3.5	10	6.2	72.5	71.2	96	30.12	1.1898	0.00	70.3
3:00	141	2.8	16	5.7	72.1	71.4	98	30.11	1.1905	0.00	70.2
4:00	162	2.3	9	4.3	71.6	71.2	99	30.10	1.1916	0.00	70.2
5:00	127	1.6	16	3.2	71.6	71.2	99	30.11	1.1912	0.00	70.3
6:00	112	2.4	14	5.7	72.2	72.0	99	30.11	1.1899	0.00	71.4
7:00	138	4.2	14	8.5	74.2	73.6	98	30.11	1.1848	0.00	73.9
8:00	155	4.4	15	7.8	76.0	75.0	97	30.11	1.1801	0.00	75.7
9:00	172	4.8	17	9.1	77.7	76.5	96	30.10	1.1757	0.00	77.4
10:00	194	8.5	19	13.5	79.9	77.9	94	30.10	1.1697	0.00	79.3
11:00	188	8.1	18	13.0	81.6	79.3	93	30.10	1.1654	0.00	81.0
12:00	174	8.8	19	15.4	83.2	81.0	93	30.09	1.1608	0.00	83.1
13:00	181	10.6	16	16.4	84.9	81.9	91	30.06	1.1559	0.00	84.4
14:00	189	12.2	17	20.0	86.0	81.7	87	30.04	1.1522	0.00	84.6
15:00	191	12.0	15	19.2	86.8	81.3	84	30.01	1.1500	0.00	84.7
16:00	180	11.1	15	17.1	86.9	81.1	83	29.99	1.1488	0.00	84.4
17:00	214	10.1	21	15.5	84.8	79.9	85	30.01	1.1547	0.00	80.8
18:00	274	10.6	26	23.1	77.3	73.4	88	30.05	1.1756	0.39	73.4
19:00	261	3.7	21	6.8	70.2	69.6	98	30.03	1.1923	0.00	70.0
20:00	190	1.6	64	3.9	70.3	70.0	99	30.02	1.1918	0.00	69.4
21:00	86	2.7	26	6.6	70.1	69.8	99	30.03	1.1924	0.01	69.1
22:00	166	2.7	41	5.0	70.5	70.2	99	30.02	1.1911	0.00	69.3
23:00	154	1.3	71	3.3	69.9	69.6	99	30.01	1.1922	0.00	68.7
24:00	176	2.0	16	3.7	70.0	69.6	99	30.01	1.1915	0.00	68.9
Average		5.6		10.0	76.4	74.6	95	30.07	1.1778		75.0
Maximum		12.2		23.1	86.9	81.9	99	30.13	1.1924		84.7
Minimum		1.3		3.2	69.9	69.6	83	29.99	1.1488		68.7
Total										0.40	

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Aberdeen Meteorological Network

DCP7 Latitude: 39.45 Longitude: 76.17 Elevation: 16.8 M Phillips Air Field

Time(EST) +1 hr (EDT)	Wind Direct (°)	Wind Speed (Mph)	Std Dev WD (°)	Peak Wind Speed (Mph)	Air Temp (°F)	Dew Point (°F)	Rel Humd (%)	Press (Ins)	Density (Kg/m3)	Total Precip (Inch)	WBGT (°F)
Friday, July 07, 1995											
1:00	178	1.0	55	2.8	69.9	69.6	99	29.99	1.1915	0.01	68.7
2:00	70	0.8	28	3.7	69.3	69.1	99	29.98	1.1923	0.00	68.4
3:00	155	1.5	20	3.4	69.9	69.6	99	29.96	1.1903	0.00	68.9
4:00	165	1.4	23	3.4	70.2	69.8	99	29.96	1.1892	0.00	68.9
5:00	191	1.3	16	3.1	70.3	70.0	99	29.97	1.1891	0.00	69.3
6:00	135	0.9	21	2.4	70.6	70.3	99	29.97	1.1888	0.00	69.8
7:00	350	1.5	87	4.5	71.2	70.9	99	29.99	1.1879	0.01	70.3
8:00	314	2.0	39	5.9	71.4	71.1	99	30.00	1.1879	0.02	70.5
9:00	313	1.4	45	3.9	72.5	72.1	99	29.99	1.1847	0.00	72.3
10:00	188	1.6	53	4.3	75.3	74.1	96	29.98	1.1771	0.00	75.7
11:00	210	3.4	17	6.5	76.3	74.7	95	29.97	1.1740	0.00	76.3
12:00	198	5.7	30	11.0	78.6	76.1	92	29.96	1.1683	0.00	78.8
13:00	209	5.9	25	11.3	79.4	76.3	90	29.95	1.1657	0.00	80.1
14:00	169	5.4	24	10.3	81.1	77.2	88	29.93	1.1612	0.00	81.1
15:00	143	5.3	17	9.0	81.0	77.4	89	29.92	1.1605	0.00	80.4
16:00	131	4.2	19	7.4	81.4	77.5	88	29.90	1.1589	0.00	80.4
17:00	128	4.8	17	8.4	82.4	78.1	87	29.88	1.1559	0.00	81.3
18:00	136	4.8	20	8.5	81.3	77.4	88	29.87	1.1580	0.00	79.0
19:00	262	1.4	80	3.2	76.9	75.0	94	29.87	1.1689	0.00	74.5
20:00	208	1.8	84	5.6	74.7	74.1	98	29.87	1.1740	0.00	73.2
21:00	162	0.9	15	5.7	74.3	73.6	98	29.87	1.1754	0.00	72.3
22:00	130	1.2	78	3.6	72.9	72.5	99	29.87	1.1785	0.00	71.6
23:00	240	2.1	23	3.6	73.0	72.7	99	29.86	1.1782	0.00	71.6
24:00	25	1.7	46	3.8	72.0	71.8	99	29.87	1.1810	0.00	70.9
Average		2.6		5.6	74.8	73.4	95	29.93	1.1766		73.9
Maximum		5.9		11.3	82.4	78.1	99	30.00	1.1923		81.3
Minimum		0.8		2.4	69.3	69.1	87	29.86	1.1559		68.4
Total										0.04	

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Aberdeen Meteorological Network

DCP7 Latitude: 39.45 Longitude: 76.17 Elevation: 16.8 M Phillips Air Field

Time(EST) +1 hr (EDT)	Wind Direct (°)	Wind Speed (Mph)	Std Dev WD (°)	Peak Wind Speed (Mph)	Air Temp (°F)	Dew Point (°F)	Rel Humd (%)	Press (Ins)	Density (Kg/m3)	Total Precip (Inch)	WBGT (°F)
Saturday, July 08, 1995											
1:00	225	2.1	27	4.8	71.5	71.2	99	29.87	1.1822	0.00	70.5
2:00	264	1.6	24	4.6	71.0	70.7	99	29.85	1.1829	0.00	69.6
3:00	316	1.4	65	2.5	68.9	68.5	99	29.84	1.1879	0.00	68.0
4:00	295	2.2	61	5.1	68.9	68.5	99	29.84	1.1881	0.00	68.0
5:00	263	2.6	29	8.4	68.6	68.4	99	29.84	1.1887	0.00	67.5
6:00	299	1.4	70	5.0	68.1	67.8	99	29.85	1.1904	0.00	66.9
7:00	280	3.0	8	5.6	69.8	69.3	98	29.85	1.1862	0.00	70.0
8:00	269	4.3	15	7.5	74.7	72.0	91	29.85	1.1740	0.00	73.9
9:00	286	5.6	18	9.9	78.3	72.0	81	29.85	1.1661	0.00	76.1
10:00	287	5.6	21	13.2	80.5	72.1	76	29.84	1.1610	0.00	78.1
11:00	302	6.4	20	13.6	80.9	71.1	72	29.84	1.1608	0.00	77.0
12:00	288	9.1	20	17.9	81.1	69.1	67	29.85	1.1610	0.00	76.6
13:00	286	9.9	21	19.1	81.2	67.5	63	29.85	1.1615	0.00	76.3
14:00	284	9.7	20	19.7	81.6	66.4	60	29.83	1.1605	0.00	76.6
15:00	292	8.7	20	17.5	81.2	65.1	58	29.82	1.1614	0.00	75.7
16:00	296	8.1	23	16.7	80.5	65.8	61	29.82	1.1626	0.00	75.2
17:00	320	8.6	22	17.2	77.5	64.8	65	29.83	1.1697	0.00	73.0
18:00	315	8.1	20	17.4	75.3	61.3	62	29.85	1.1767	0.00	70.5
19:00	303	6.8	22	20.0	72.7	59.0	62	29.88	1.1839	0.00	67.1
20:00	307	4.6	16	9.7	68.7	57.4	67	29.89	1.1940	0.00	63.0
21:00	302	2.8	15	6.4	66.4	57.0	72	29.90	1.1994	0.00	61.2
22:00	293	2.0	9	4.5	63.6	57.0	79	29.91	1.2064	0.00	59.2
23:00	306	2.6	16	5.0	62.5	57.9	85	29.91	1.2088	0.00	58.6
24:00	308	3.6	15	9.1	62.1	57.9	86	29.91	1.2096	0.00	58.3
Average		5.0		10.9	73.1	65.7	79	29.86	1.1802		69.9
Maximum		9.9		20.0	81.6	72.1	99	29.91	1.2096		78.1
Minimum		1.4		2.5	62.1	57.0	58	29.82	1.1605		58.3
Total										0.00	

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Aberdeen Meteorological Network

DCP7 Latitude: 39.45 Longitude: 76.17 Elevation: 16.8 M Phillips Air Field

Time(EST) +1 hr (EDT)	Wind Direct (°)	Wind Speed (Mph)	Std Dev WD (°)	Peak Wind Speed (Mph)	Air Temp (°F)	Dew Point (°F)	Rel Humd (%)	Press (Ins)	Density (Kg/m3)	Total Precip (Inch)	WBGT (°F)
Sunday, July 09, 1995											
1:00	322	3.7	20	7.4	62.0	57.7	86	29.91	1.2099	0.00	58.1
2:00	304	3.6	24	10.3	62.0	57.7	86	29.91	1.2100	0.00	58.1
3:00	299	2.7	22	7.7	61.0	57.4	88	29.90	1.2119	0.00	57.4
4:00	279	2.2	25	7.7	59.5	56.7	90	29.90	1.2159	0.00	56.3
5:00	237	1.4	29	3.8	56.4	55.2	96	29.91	1.2237	0.00	54.5
6:00	241	1.3	14	2.9	57.1	56.3	97	29.92	1.2222	0.00	58.3
7:00	287	3.0	23	6.1	62.4	60.1	92	29.93	1.2093	0.00	63.1
8:00	317	4.7	23	10.9	66.2	60.8	83	29.93	1.2004	0.00	66.0
9:00	307	4.8	30	10.3	68.7	60.8	76	29.94	1.1950	0.00	68.2
10:00	300	3.7	38	11.2	69.0	60.3	74	29.93	1.1941	0.00	67.5
11:00	306	4.6	26	11.7	70.1	61.0	73	29.93	1.1914	0.00	68.9
12:00	320	4.8	42	15.6	71.6	61.7	71	29.93	1.1875	0.00	71.2
13:00	297	3.6	50	10.0	73.0	63.0	71	29.91	1.1838	0.00	72.9
14:00	298	4.5	42	10.3	74.0	63.1	69	29.90	1.1806	0.00	73.8
15:00	308	4.7	33	11.8	75.0	64.0	69	29.89	1.1780	0.00	73.6
16:00	298	2.9	51	8.9	75.9	64.9	69	29.88	1.1754	0.00	74.3
17:00	301	4.0	39	9.8	76.7	65.3	68	29.87	1.1731	0.00	73.9
18:00	315	3.2	25	7.8	77.3	65.1	66	29.88	1.1722	0.00	73.6
19:00	34	2.1	46	5.0	76.5	66.4	71	29.88	1.1735	0.00	72.0
20:00	72	0.6	47	2.1	68.8	64.4	86	29.89	1.1914	0.00	65.5
21:00	20	0.1	1	1.2	65.0	63.3	94	29.89	1.2008	0.00	62.4
22:00	329	1.0	25	2.4	62.5	61.9	98	29.90	1.2073	0.00	60.6
23:00	300	1.2	39	3.4	61.0	60.6	99	29.90	1.2111	0.00	59.5
24:00	310	0.6	9	2.1	61.1	60.8	99	29.91	1.2115	0.00	59.7
Average		2.9		7.5	67.2	61.2	82	29.91	1.1971		65.4
Maximum		4.8		15.6	77.3	66.4	99	29.94	1.2237		74.3
Minimum		0.1		1.2	56.4	55.2	66	29.87	1.1722		54.5
Total										0.00	

Aberdeen Meteorological Network

DCP7 Latitude: 39.45 Longitude: 76.17 Elevation: 16.8 M Phillips Air Field

Time(EST) +1 hr (EDT)	Wind Direct (°)	Wind Speed (Mph)	Std Dev WD (°)	Peak Wind Speed (Mph)	Air Temp (°F)	Dew Point (°F)	Rel Humd (%)	Press (Ins)	Density (Kg/m3)	Total Precip (Inch)	WBGT (°F)
Monday, July 10, 1995											
1:00	345	0.6	18	1.8	61.6	61.3	99	29.91	1.2099	0.00	60.3
2:00	344	1.8	10	4.1	62.5	62.2	99	29.90	1.2073	0.00	61.2
3:00	311	0.8	52	1.9	63.0	62.8	99	29.90	1.2056	0.00	61.7
4:00	284	0.8	25	2.0	63.1	62.8	99	29.90	1.2052	0.00	62.1
5:00	240	3.0	25	10.1	64.0	63.3	98	29.91	1.2037	0.01	63.0
6:00	264	2.1	33	4.4	64.9	64.2	98	29.92	1.2018	0.00	63.5
7:00	285	0.7	19	2.3	65.1	64.8	99	29.94	1.2015	0.00	64.0
8:00	300	2.0	23	4.7	66.8	66.2	98	29.94	1.1977	0.00	66.4
9:00	266	3.2	22	5.4	69.9	68.0	94	29.95	1.1901	0.00	68.7
10:00	237	4.7	29	10.9	73.6	71.2	92	29.94	1.1805	0.00	74.3
11:00	226	6.3	17	10.7	77.0	70.7	81	29.95	1.1731	0.00	76.3
12:00	234	6.4	25	11.2	79.1	70.9	76	29.94	1.1686	0.00	80.8
13:00	240	5.0	31	11.4	80.9	71.1	72	29.93	1.1638	0.00	
14:00	193	7.8	21	12.1	81.2	70.9	71	29.92	1.1630	0.00	82.6
15:00	185	8.2	22	13.6	81.2	70.5	70	29.91	1.1627	0.12	79.5
16:00	182	9.9	16	14.8	81.1	70.3	70	29.89	1.1623	0.00	79.3
17:00	194	10.4	14	14.4	80.8	69.6	69	29.89	1.1630	0.00	79.7
18:00	198	9.0	10	13.5	80.0	69.8	71	29.88	1.1647	0.00	78.6
19:00	202	5.8	11	11.1	77.2	69.1	76	29.88	1.1710	0.00	74.3
20:00	200	2.6	6	4.3	74.5	68.5	82	29.88	1.1769	0.00	72.0
21:00	200	3.8	10	8.3	73.0	70.2	91	29.88	1.1795	0.00	70.7
22:00	212	4.3	7	6.0	73.2	71.1	93	29.91	1.1798	0.00	71.1
23:00	198	3.7	19	5.7	73.1	71.6	95	29.90	1.1797	0.00	70.7
24:00	213	3.5	24	5.6	72.2	71.2	97	29.89	1.1815	0.01	70.0
Average		4.4		7.9	72.5	68.0	87	29.91	1.1830		70.9
Maximum		10.4		14.8	81.2	71.6	99	29.95	1.2099		82.6
Minimum		0.6		1.8	61.6	61.3	69	29.88	1.1623		60.3
Total										0.14	

Report created on: 12-Jul-95 Number of records 48 Page No. 1

Aberdeen Meteorological Network

DCP7 Latitude: 39.45 Longitude: 76.17 Elevation: 16.8 M Phillips Air Field

Time(EST) +1 hr (EDT)	Wind Direct (°)	Wind Speed (Mph)	Std Dev WD (°)	Peak Wind Speed (Mph)	Air Temp (°F)	Dew Point (°F)	Rel Humd (%)	Press (Ins)	Density (Kg/m3)	Total Precip (Inch)	WBGT (°F)
Tuesday, July 11, 1995											
1:00	119	2.7	85	21.2	71.0	70.2	97	29.89	1.1846	0.10	68.9
2:00	40	8.9	58	27.4	65.4	64.9	98	29.90	1.1996	0.81	64.8
3:00	77	4.3	28	9.9	65.5	65.1	99	29.89	1.1986	0.01	64.8
4:00	271	3.3	45	6.3	64.9	64.6	99	29.87	1.1993	0.00	64.0
5:00	356	2.9	27	6.4	64.3	64.0	99	29.88	1.2014	0.00	63.5
6:00	44	3.4	10	6.2	64.6	64.4	99	29.89	1.2011	0.00	64.4
7:00	8	2.9	19	5.8	67.0	66.7	99	29.92	1.1960	0.00	67.6
8:00	12	3.5	22	6.6	69.0	68.4	98	29.92	1.1912	0.00	70.3
9:00	349	2.9	41	7.1	72.8	71.6	96	29.92	1.1813	0.00	75.0
10:00	333	3.7	30	7.9	74.9	72.7	93	29.92	1.1761	0.00	75.6
11:00	69	4.7	45	9.1	77.3	74.8	92	29.94	1.1708	0.00	77.9
12:00	72	5.2	26	9.8	79.1	75.9	90	29.94	1.1665	0.00	80.4
13:00	70	3.6	38	7.8	81.4	77.2	87	29.93	1.1603	0.00	
14:00	132	3.3	60	8.3	81.7	77.2	86	29.92	1.1592	0.00	
15:00	324	3.0	66	7.5	84.3	74.3	72	29.90	1.1545	0.00	
16:00	315	4.3	39	9.6	85.1	71.1	63	29.90	1.1540	0.00	
17:00	109	4.1	74	9.3	84.7	73.4	69	29.89	1.1537	0.00	
18:00	147	4.8	10	7.6	81.9	73.9	77	29.91	1.1598	0.00	
19:00	174	3.2	18	5.9	79.4	72.7	80	29.92	1.1661	0.00	
20:00	193	1.0	25	2.9	75.2	72.0	90	29.93	1.1763	0.00	
21:00	271	0.9	9	2.9	72.1	70.5	95	29.94	1.1843	0.00	
22:00	278	0.6	14	2.1	69.9	69.3	98	29.96	1.1904	0.00	
23:00	294	1.1	29	2.2	67.8	67.5	99	29.97	1.1963	0.00	
24:00	208	1.1	70	3.2	67.4	67.1	99	29.98	1.1974	0.00	
Average		3.3		8.0	73.6	70.4	91	29.92	1.1800		69.8
Maximum		8.9		27.4	85.1	77.2	99	29.98	1.2014		80.4
Minimum		0.6		2.1	64.3	64.0	63	29.87	1.1537		63.5
Total										0.92	

Ground Moisture

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
3/9/92	1 135 m	102.50	80.81	26.90
	2 450 m	77.00	52.65	46.25
	3 400 m	97.98	69.57	40.84
	4 300 m	100.30	68.44	46.67
	5 170 m	101.20	77.01	31.52

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
3/16/92	1 135 m	77.72	57.83	34.39
	2 450 m	79.36	49.56	60.11
	3 400 m	77.41	59.75	29.56
	4 300 m	76.94	49.44	55.61
	5 170 m	91.57	69.68	31.42
	6 135 m	75.37	51.02	47.72
	7 135 m	79.96	36.67	100.00

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
3/23/92	1 135 m	94.81	68.54	38.32
	2 450 m	96.32	67.67	42.33
	3 400 m	91.32	61.21	49.17
	4 300 m	85.53	47.06	81.71
	5 170 m	88.98	67.89	31.06
	6 135 m	74.44	49.24	51.16
	7 135 m	64.38	28.68	124.4
	8 Perryman	87.97	64.92	35.50
3/24/92	5 170 m	89.37	64.64	38.26
3/25/92	1 135 m	97.63	72.90	33.93
	2 450 m	78.04	48.98	59.47
	3 400 m	82.71	57.13	44.76
	4 ~~170~~ 300 m	87.90	53.96	62.88
	5 170 m	88.42	68.30	29.47
	6 135 m	73.24	49.66	47.49
	7 135 m	67.83	32.05	111.6
	8 Perryman	67.83	76.16	26.51

Note: % Moisture above 100% is unreliable.

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
3/30/92	1 135 m	96.24	74.04	29.99
	2 450 m	91.58	65.78	39.23
	3 400 m	94.29	71.63	31.64
	4 300 m	80.98	52.26	54.95
	5 170 m	93.14	74.75	24.59
	6 135 m	70.65	49.56	42.55
	7 135 m	71.06	37.82	87.91

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
4/6/92	1 135 m	90.82	70.94	28.03
	2 450 m	86.03	58.99	45.82
	3 400 m	83.80	72.14	16.15
	4 300 m	68.78	46.72	47.19
	5 170 m	87.48	68.98	26.82
	6 135 m	69.41	49.82	39.31
	7 135 m	68.06	39.19	73.68

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
4/13/92	1 135 m	92.84	75.66	22.71
	2 450 m	85.38	62.64	36.30
	3 400 m	90.63	79.16	14.48
	4 300 m	66.77	44.26	50.86
	5 170 m	87.64	70.88	23.64
	6 135 m	61.67	44.67	38.06
	7 135 m	62.47	39.81	56.93

U.S. ARMY COMBAT SYSTEMS TEST ACTIVITY
ABERDEEN PROVING GROUND, MARYLAND 21005-5059
ENGINEERING DIRECTORATE
PHYSICAL TEST DIVISION
REPORT NO. 92-CC-264

STECS-EN-PC Date of Report: 3 April 1992

Title of Report: Soil Analysis for Physical Dosimetry in Simulated Tactical Nuclear Environments

TECOM Project Title: Physical Dosimetry in Simulated Tactical Nuclear Environments

TECOM Project No.: 2-CO-430-APR-100 W.O. No. 330-79214-70

Conducted for: Dr. Craig Heinbach, Test and Research Div Bldg 860

References: Operation Manual of Seaman Nuclear Moisture/Density Meter, SOP 385-304

2.1. Introduction

Moisture and density measurements were determined and recorded a day prior to test day, the day of the test and the day after testing. Measurements were taken in the 400 meter field and around the reactor.

Testing was conducted from 23 March through 25 March 1992.

2.2 SOIL ANALYSIS

2.2.1 Objective

To determine the bulk and dry densities and moisture content of the soil around the reactor area for the simulated nuclear environments test.

2.2.2 Criterion

None.

2.2.3 Test Procedure

a. The area covered during this test was the 400 meter field adjacent to the reactor and several locations around the reactor, and one location on Perryman Test Course. Eight readings were taken at various measured and marked distances from the reactor the day prior to and the day after actual reactor testing. On the day of the actual test only one reading was taken at Position 5, located at 170 meters. All positions were marked so that readings would be taken at the same locations each time a test was performed. Locations are shown in the drawing in Appendix I.

b. The moisture and density data were determined by using a C-200 Seaman Nuclear Moisture/Density meter. The bulk density, dry density and percentage of moisture were calculated electronically by the meter using the following formulas:

(1) $\frac{\text{Air gap count}}{\text{Contact count}}$ = wet (bulk density)

(2) $\frac{\text{Moisture reading}}{\text{Moisture std count}}$ = lbs/ft moisture

(3) $\frac{\text{G/cm (lbs/ft) water x 100}}{\text{Dry density}}$ = % moisture

2.2.4 Test Findings

Table 1, Appendix II, shows the moisture and density data for each day of testing.

2.1.5 Technical Assessment

The moisture content ranged from 24 to 100 percent. No criterion were given for the density or percent moisture.

2 Encls
Appendix I - Drawing
Appendix II - Tables

SUBMITTED:

Wayne A. Noble

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Chemistry Branch

REVIEWED:

Robert F. Durgin

ROBERT F. DURGIN
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James P. Finfera

JAMES P. FINFERA
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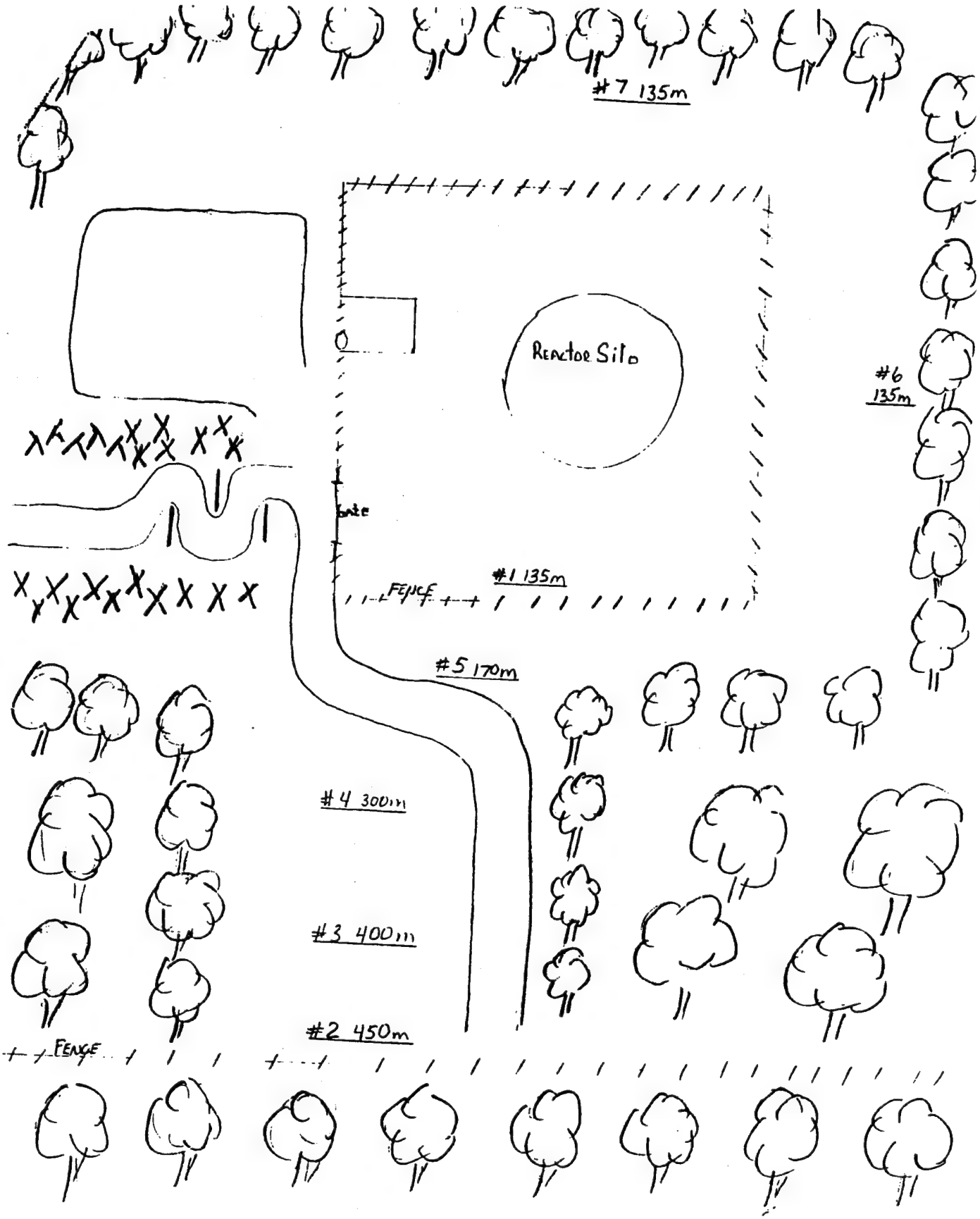
Physical Test Division



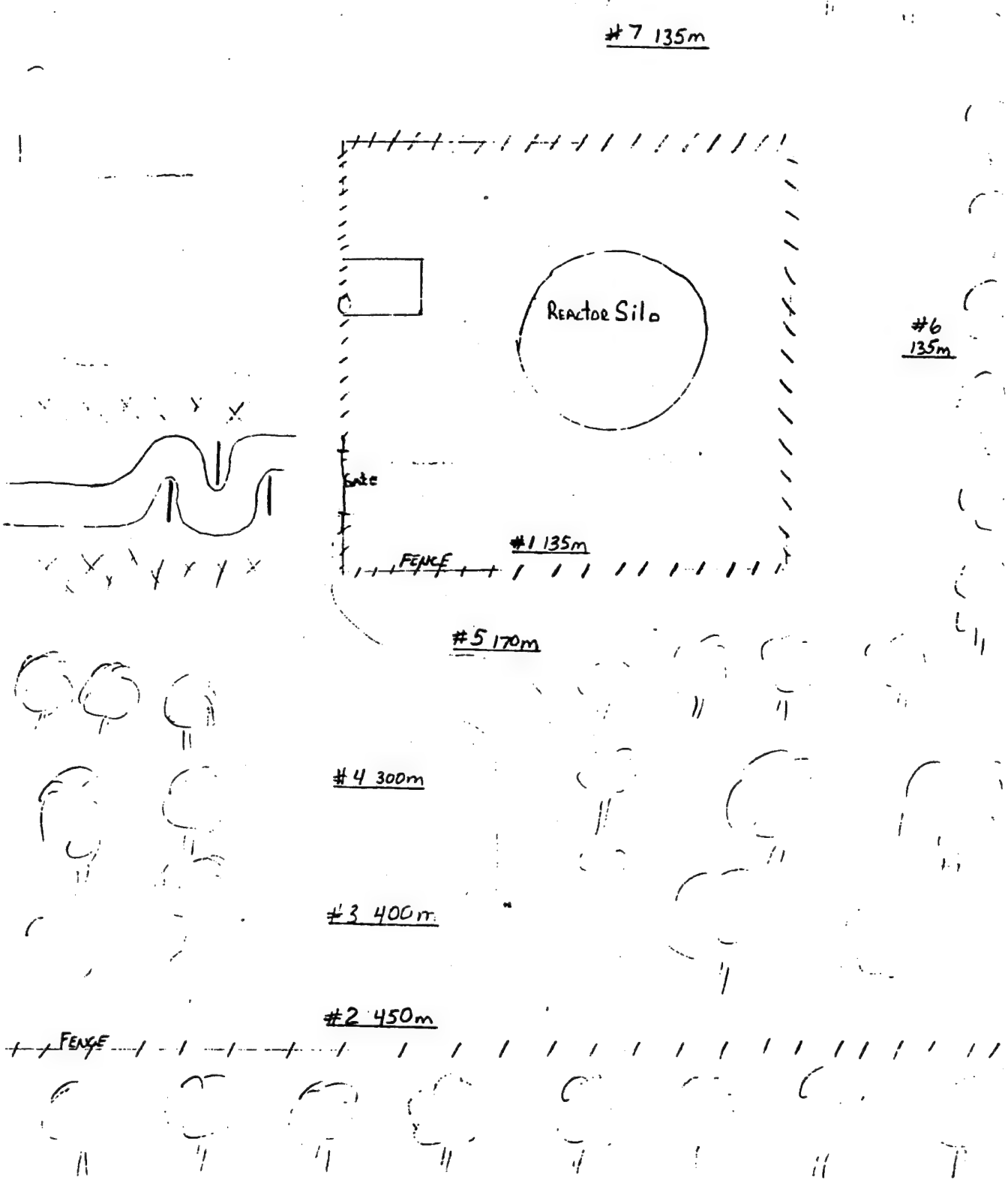
APPENDIX I

#8 Perryman Test course

TABLE 1. MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
3/23/92	1 135 m	94.81	68.54	38.32
	2 450 m	96.32	67.67	42.33
	3 400 m	91.32	61.21	49.17
	4 300 m	85.53	47.06	81.71
	5 170 m	88.98	67.89	31.06
	6 135 m	74.44	49.24	51.16
	7 135 m	64.38	28.68	100.0
	8 Perryman	87.97	64.92	35.50
3/24/92	5 170 m	89.37	64.64	38.26
3/25/92	1 135 m	97.63	72.90	33.93
	2 450 m	78.04	48.98	59.47
	3 400 m	82.71	57.13	44.76
	4 ~~170~~ 300 m	87.90	53.96	62.88
	5 170 m	88.42	68.30	29.47
	6 135 m	73.24	49.66	47.49
	7 135 m	67.83	32.05	100.0
	8 Perryman	67.83	76.16	26.51

APPENDIX II



#8 Perryman Test course

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
5/26/92	1 135 m	88.00	71.41	23.21
	2 450 m	84.98	63.53	33.76
	3 400 m	88.18	72.27	22.03
	4 300 m	88.16	65.19	35.23
	5 170 m	82.59	68.00	21.46
	6 135 m	67.99	48.46	40.29
	7 135 m	98.82	73.70	34.08
	8 700 m Perryman	No data for this position due to rain.		

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
5/27/92	3 400 m	102.80	82.20	25.07
	5 170 m	81.51	61.38	32.79
	10 1600 m Obsticle course	71.02	55.09	28.89

MOISTURE DENSITY TEST DATA

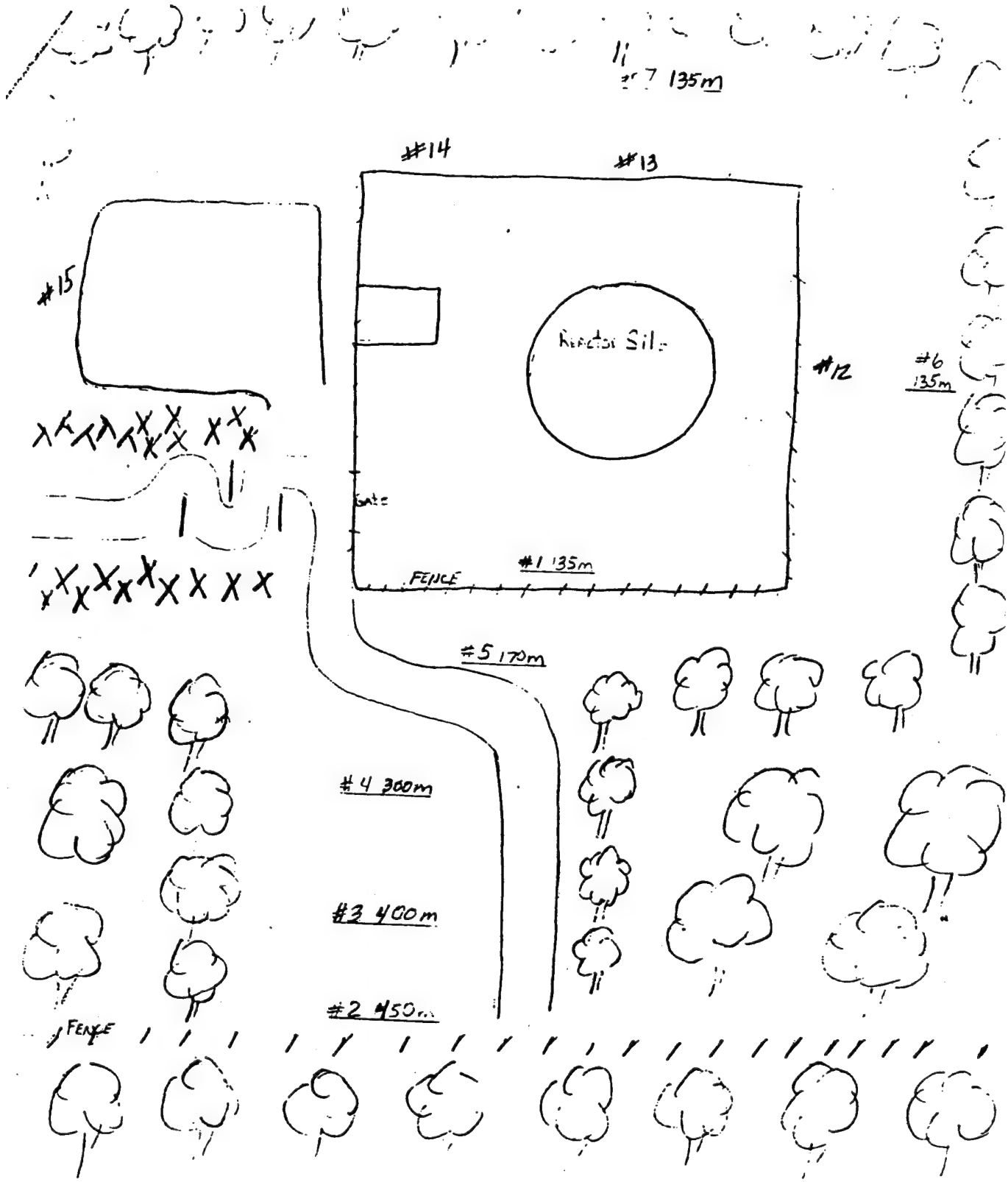
DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
5/29/92	1 135 m	87.78	70.12	25.19
	2 450 m	71.06	51.23	38.07
	3 400 m	96.48	78.40	23.06
	4 300 m	87.76	67.75	29.53
	5 170 m	86.88	73.00	19.00
	6 135 m	67.78	51.38	31.92
	7 135 m	87.04	63.15	37.83
	8 700 m Perryman	99.33	83.71	18.66
	9 Perryman Hill	103.70	93.72	10.70
	10 1600 m Obsticle course	85.45	75.24	13.56
	11 Michaels ville	84.23	68.61	22.76

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
6/8/92	1 135 m	89.17	70.30	26.83
	2 450 m	83.45	59.91	39.10
	3 400 m	96.72	74.90	29.13
	4 300 m	105.2	79.93	31.71
	5 170 m	89.37	72.91	22.57
	6 135 m	67.81	47.56	42.57
	7 135 m	92.35	58.18	58.72
	10 1600 m Obsticle course	85.45	66.95	27.64
	11 Michaels ville	82.42	60.29	36.70

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
6/17/92	1 135 m	87.20	76.93	13.34
	5 170 m	113.8	93.79	21.33
	6 135 m	75.36	57.63	30.75
	7 1350 m	105.9	79.02	34.11
	12 --- m	88.63	73.01	21.39
	13 --- m	94.46	83.83	12.68
	14 --- m	82.39	69.78	18.07
	15 ---m	95.43	83.06	14.89



APPENDIX I

#2 Derryman Test Course

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
7/7/92	1 135 m	92.09	75.21	22.44
	2 450 m	84.02	63.65	32.00
	3 400 m	102.7	86.97	18.16
	4 300 m	110.7	90.75	22.04
	5 170 m	94.63	77.50	22.09

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
8/24/92	1 135 m	91.00	73.27	24.18
	2 450 m	90.58	67.68	33.82
	3 400 m	95.37	78.61	21.32
	4 300 m	104.8	86.15	21.69
	5 170 m	112.2	92.49	21.37
8/25/92	1 135 m	80.98	64.28	25.98
	3 400 m gravel	113.1	107.2	5.480
8/27/92	2 450 m	85.09	65.57	29.78
	3 400 m gravel	131.5	126.7	3.787
	4 300 m	110.9	94.57	17.34
	15 70 m	94.80	91.52	16.28
8/28/92	15 70 m	92.62	78.69	17.71
8/31/92	5 170 m	97.16	79.37	22.40
	13 70 m	107.3	91.61	17.18
	7 135 m	87.93	64.88	35.52
	3 400 m gravel	114.0	108.9	4.682
	4 300 m	95.15	79.17	20.18
9/1/92	8 700 m Perryman	100.8	91.88	9.803
9/2/92	8 700 m Perryman	77.96	70.82	10.08
9/3/92	3 400 m gravel	117.2	109.8	6.720

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
6/14/93	1 300 m	74.63	53.47	39.56
	2 300 m	59.30	42.04	41.08
	3 300 m	81.92	61.13	33.99
	4 170 m	106.7	91.57	16.52
	5 1600 m Obsticle course	99.26	91.44	8.550
	6 Michaels ville	74.34	65.22	13.97

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
6/15/93	1 300 m	74.47	53.78	38.47
	2 300 m	Position under tent no data.		
	3 300 m	60.15	44.37	35.57
	4 170 m	86.87	75.81	14.58
	5 1600 m Obsticle course	97.80	89.52	9.250
	6 Michaels ville	77.58	69.39	11.80

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
6/16/93	5 1600 m Obsticle course	91.30	83.66	9.123
	6 Michaels ville	87.88	80.71	8.883

MOISTURE DENSITY TEST DATA

DATE	POSITION # AND LOCATION	BULK DENSITY	DRY DENSITY	% MOISTURE
6/18/93	1 300 m	72.94	56.50	29.08
	2 300 m	Position under tent no data.		
	3 300 m	61.82	48.22	28.31
	4 170 m	98.06	86.90	12.83
	5 1600 m Obsticle course	89.32	83.73	6.682
	6 Michaels ville	71.09	63.92	11.21

Run Sheets

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS91-123

Date 3 MAY 91

Experiment X20-85 Approval TPC # 11-90 Dosimetry On exp

Exp. Location 400m, 1.1Km Dist to RX C/L 400m, 1.1Km EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL On B10 Shield On Safety tube On RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 53 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: TLD's in Box w/ Phantom 0°; Los Alamos on HILLW/ Lined Box
Spectrometer, HPL, ETCA, AFRRI on Phantom in Box

Reactor Power Level Required 8KW Reactor Mode : (SS) PP

Linear Level 30 Range 10^{-4} Duration: 375 mins (22500 ~~secs~~) 23183

1/e Level 11 Range 10^{-4} Estimated Peak Temperature ≤320 °C

TIME: 1/e 0943 24 Shutdown 1609 47

Time	0945 24	1317 24	1330 24	1609 47
Linear Level	30	38	30	30
Linear Range	10^{-4}	10^{-5}	10^{-4}	10^{-4}
Log N	No Good O.O.S. Hi Volt out	—	—	—
T/C # 7	68.0	321.2	211.0	319.2
T/C #8	61.0	310.1	199.0	309.8
SB	11.582	—	—	—
MAR	5.152	—	—	5.152
RR	2.550	—	4450	6.377
RX Power	8KW	1KW	8KW	8KW

TEMP 3000 Kw Mins

SC#1 602°
#2 586°
#3 310°

214 mins @ 8Kw = 1712
13 mins @ 1Kw = 13
~~1725~~
1725
~~153 13 mins~~ 159.38 @ 8KW 1275
3000 Kw M

F/UK
#1 68
#2 52
#3 52

REMARK: Ran 1Kw for 13 mins
Ran 8Kw for remainder of run
3000 Kw Mins or 50 Kw-Hrs Total Mcg

Time above 350 °C NONE Integrated Power (Instru) 50 Kw-HRS

Duration of Operation 23183 secs Integrated Power (Sulfur)

Remarks Cooling w/o Vortex " B " Tower Notified V Gwaltney @ 1621

Operator (sign) MC Dargin Supervisor (sign) D Harrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

~~1558~~
1609 47

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-66

Date 24 Mar 92

Experiment X20-85 Approval TAC 5-92 Dosimetry on Exp.

Exp. Location various outdoors Dist to RX C/L 150-700 meters EXP INSP BY ###

RHD Track # 6 Height 40'1½" Dist to Bldg Ctr 149'10" RHD INSP BY ###

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY ###

RX Operator MCG HP Operator DCM RX Supervisor ###

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 53 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: Dosimetry @ various outdoor locations, stands w/ TLDs, Sulfur, Chlorine + gold.
@ 170, 300, 400, 450, 3 stands in treeline, and @ 700 meters a CRANE @ ≈ 100 ft. Height.

Argo: GM, BF3 and Bonner ball's @ 400 meters

Reactor Power Level Required 50 watts / 8 kw Reactor Mode : (SS) PP

Linear Level 63 / 30 Range 3×10^{-7} / 10^{-4} Duration: MIN FOR DATA (TOTAL ≥ 7 HRS) mins( ) secs)

1/e Level 23 / 11 Range 3×10^{-7} / 10^{-4} Estimated Peak Temperature ≤ 318 °C

TIME: 1/e 1135 30 Shutdown ~~1754 30~~ 1157 30

Time	1137 30	1144 30	1757 30		
Linear Level	63	30	/		PM#1 6.8×10^{4}
Linear Range	3×10^{-7}	10^{-4}	/		PM#2 1.4×10^{4}
Log N	0.45	80	/		LN#3 1.15×10^{4}
T/C # 7	14.5	61.5	318.0		
T/C #8	14.5	54.0	316.0		7 mins @ 50 watts = 0.35
SB	11592	/	/		
MAR	5.214	5.347	/		Flux
RR	1.820	2.300	6.102		#1 64 % #2 52 % #3 54 %
RX Power	50 Watts	8 KW	/		

375 mins
3000. kw
3000.35 Kw/Mins

Time above 350 °C NONE Integrated Power (Instru) 3000.35 Kw Mins

Duration of Operation 375 mins Integrated Power (Sulfur)

Remarks Cooling w/o Vortex " B " Tower Notified MC Commas @ 1800

Operator (sign) MC Morgan Supervisor (sign) ###

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-154

Date 27 MAY 92

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP.

Exp. Location ~~1,162 1600~~ ~~70,400~~ VARIOUS Dist to RX C/L VARIOUS EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator JCB/DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 52 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA @ Various Positions

Reactor Power Level Required 8 KW Reactor Mode : (SS) PP

Linear Level 30 Range 10^{-4} Duration: LONG RUN MIN. FOR DATA mins(secs)

1/e Level 11 Range 10^{-4} Estimated Peak Temperature ≤320°C

TIME: 1/e 1113 36 Shutdown 1611 36

Time	1115 36	1148 36	1611 36		
Linear Level	30	28.5	/		35 MINS @ 8 KW = 280 Kw Min
Linear Range	10^{-4}	/	/		263 mins @ 7.5 KW = 1972.5 Kw M
Log N	75	/	/		298 mins
T/C # 7	69.0	310.3	316.2		
T/C #8	60.0	295.4	302.3		
SB	11.586	/	/		
MAR	5.598	/	/		
RR	3,000?	5.496	5.620		
RX Power	8KW	7.5KW	/		

Time above 350°C NONE Integrated Power (Instru) 2252.5 Kw Mins

Duration of Operation 298 mins Integrated Power (Sulfur)

Remarks Cooling w/o Vortex " B " Tower Notified N/A

Operator (sign) MC Dugin Supervisor (sign) Dr Hamell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5592-155

Date 27 MAY 92

Experiment A20-85 Approval TRC 5-92 Dosimetry ON EXP.

Exp. Location 170 meters Dist to RX C/L 170 EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 53 GHIGN B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 52 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA @ 170 M and Michaelsville Range area

Reactor Power Level Required 5 watts Reactor Mode : (SS) PP

Linear Level 63 Range 3×10^{-8} Duration: ≈ 5.0 mins (300 secs)

1/e Level 23 Range 3×10^{-8} Estimated Peak Temperature ≤ 70 °C

TIME: 1/e 1712 07 Shutdown 1717 07

Time	1714 07	1717 07			
Linear Level	63	/			
Linear Range	3×10^{-5}	/			
Log N	0.05	/			
T/C # 7	29.0	29.5			
T/C #8	28.0	28.7			
SB	11.592	/			
MAR	4.217	/			
RR	3.810	3.818			
RX Power	5 watts	/			

Time above 350 °C None Integrated Power (Instru) 0.025 Kwatt mins

Duration of Operation 5 mins Integrated Power (Sulfur) _____

Remarks No Cooling " B " Tower Notified N/A

Operator (sign) MC Mayer Supervisor (sign) D M Harrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-156

Date 28 May 92

Experiment X20-85 Approval TPR 5-92 Dosimetry ON EXP.

Exp. Location Various on floor Dist to RX C/L 135-1100 meters EXP INSP BY DRH

RHD Track # 6 Height 40'1½" Dist to Bldg Ctr 149'10" RHD INSP BY DRH

Rx Core 5B GHL on plugged B10 Shield on Safety tube on RX. INSP BY DRH

RX Operator Hfz HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: Gold, Sulfur @ 135, 170, 300, 400, 450 meters (DRH)
DXE @ 1.1 km Hill w/JWG

Reactor Power Level Required 10 watts Reactor Mode : (SS) PP

Linear Level 38 Range 10^{-7} Duration: 5 mins(300 secs)

1/e Level 14 Range 10^{-7} Estimated Peak Temperature ≤100 °C

TIME: 1/e 1009 35 Shutdown 1014 35

Time	1011 35	1014 35			
Linear Level	38	—			
Linear Range	10^{-7}	—			
Log N	0.09	—			
T/C # 7	25.0	24.8			
T/C #8	24.5	24.3			
SB	11.590	—			
MAR	5,000	—			
RR	2.488	2.378			
RX Power	10 watts	—			

Time above 350 °C None Integrated Power (Instru) 0.05 kW-mins

Duration of Operation 5 mins Integrated Power (Sulfur) _____

Remarks NO COOLING "B" Tower Notified N/A

Operator (sign) [signature] Supervisor (sign) [signature]

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5592-157

Date 28 May 92

Experiment X20-85 Approval TRC 5-92 Dosimetry ON EXP

Exp. Location Various outdoor Dist to RX C/L up to 1.1 km EXP INSP BY DRH

RHD Track # 6 Height 40'1½" Dist to Bldg Ctr 149'10" RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator Hoe HP Operator Dion (Plugged) RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DOE / APRF Dosimetry on 1.1 km Hill and other locations outside Rx. Bldg.

Reactor Power Level Required 8 kW Reactor Mode : (SS) PP

Linear Level 30 Range 10^{-4} Duration: 375 mins(22,500 secs)

1/e Level 11 Range 10^{-4} Estimated Peak Temperature < 320 °C

TIME: 1/e 1116 19 Shutdown 1731 19

Time	1118 19	1731 19			
Linear Level	30	—			
Linear Range	10^{-4}	—			1116 19
Log N	75	—			615 00 / 1731 19
T/C # 7	65	318.0			
T/C #8	57	302.7			
SB	11,589	—			
MAR	5,623	—			
RR	1,780	5,568			
RX Power	8 kW	—			

Time above 350 °C None Integrated Power (Instru) 3000 kW-mins

Duration of Operation 375 mins Integrated Power (Sulfur) _____

Remarks Sub-cooled Vertex off @ s/u - temp 16.1°C " B " Tower Notified McConagee 1732

Operator (sign) _____ Supervisor (sign) _____

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-158

Date 29 MAY 92

Experiment X20-85 Approval TPC 12-92 TPC 5-92 Dosimetry ON EXP.

Exp. Location 700 METERS Dist to RX C/L 700 M. EXP INSP BY DRH

RHD Track # 6 Height MAX Up Dist to Bldg Ctr MAX Out RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator HFC HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DOE/APRF Dos. @ 700 METERS

Reactor Power Level Required 500W Reactor Mode : (SS) PP

Linear Level 63 Range 3×10^{-6} Duration: MIN FOR DATA mins(——— secs)

1/e Level 23 Range 3×10^{-6} Estimated Peak Temperature ≤ 300°C

	TIME:	1/e 1018 SS		Shutdown 1200 SS	
Time	1020 SS	1200 SS			
Linear Level	63	—			
Linear Range	3×10^{-6}	—			6080
Log N	4.5	—			
T/C # 7	31.7	94.6			
T/C #8	30.9	91.3			
SB	11,590	—			
MAR	5,222	—			
RR	2,084	2,996			
RX Power	500W	—			

Time above 350°C None Integrated Power (Instru) 50.75 Kw-mins

Duration of Operation 101.5 mins Integrated Power (Sulfur) ———

Remarks Coding on @ 95 mins (no vortex) " B " Tower Notified ✓ Burke 1205

Operator (sign) HFC Supervisor (sign) DRHarrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-186

Date 17 JUN 92

Experiment X8-92 Approval TPL 14-92 Dosimetry ON EXP.

Exp. Location 170 meters Dist to RX C/L 170 meters EXP INSP BY ###

RHD Track # 6 Height MAX. UP Dist to Bldg Ctr MAX. OUT RHD INSP BY ###

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY ###

RX Operator MLG HP Operator DCM RX Supervisor ###

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 54 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: French Dosimetry in vehicle

Reactor Power Level Required 8 kW Reactor Mode (SS) PP

Linear Level 30 Range 10^{-4} Duration: 90 mins(5,400 secs)

1/e Level 11 Range 10^{-4} Estimated Peak Temperature ~320°C

TIME: 1/e 1001 33 Shutdown 1131 33

Time	1003 33	1131 33			
Linear Level	30	/			
Linear Range	10^{-4}	/			
Log N	80	/			
T/C # 7	87.1	317.2			
T/C #8	77.4	302.9			
SB	11.584	/			
MAR	5.524	/			
RR	2.350	5.761			
RX Power	8 KW	/			

Time above 350°C NONE Integrated Power (Instru) 726.0 Kw Mins

Duration of Operation 90 mins Integrated Power (Sulfur) _____

Remarks Cooling w/o Vortex " B " Tower Notified N/A

Operator (sign) MC Geiger Supervisor (sign) ###

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-210

Date 7 July 92

Experiment X20-85 (CRH) Approval 5-92 TPC Dosimetry on exp

Exp. Location See remarks Dist to RX C/L See remarks EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr max OUT RHD INSP BY DRH

Rx Core 53 GHL plugged on B10 Shield on Safety tube on RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 52 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: 135, 170, 300, 400, 450 meters
Au, Sulfur, and Chlorine Dosimetry

Reactor Power Level Required 8KW Reactor Mode : (SS) PP

Linear Level 30 Range 10^{-4} Duration: 6hrs 15 (375 mins) mins (22500 secs)

1/e Level 11 Range 10^{-4} Estimated Peak Temperature ≤ 320°C

TIME: 1/e 0957 10 Shutdown 1612 10

Time	0959 10	1612 10			
Linear Level	30	/			50 Kw Hrs / 8 Kw
Linear Range	10^{-4}	/			
Log N	80	/			6hrs . 15mins = 22,500 s
T/C # 7	73.0	315.9			
T/C #8	65.0	300.8			0957 10 / 615 00 / 1612 10
SB	11.585	/			
MAR	5.692	/			
RR	1.750	5.466			
RX Power	8KW	/			

Time above 350°C NONE Integrated Power (Instru) 3000.0 Kw Mins

Duration of Operation 22500 secs Integrated Power (Sulfur) _____

Remarks Cooling W/o Vortex " B " Tower Notified @ 1615 6 on 1 Hwy

Operator (sign) M.C. Gugin Supervisor (sign) D.M. Stansell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 3S92.228

Date 24 AUG 92 (July 92)

Experiment X20-85 Approval TPC 5-92 TPC 12 92 Dosimetry ON EXP.

Exp. Location 170 METERS Dist to RX C/L 170 M EXP INSP BY DRM

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRM

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRM

RX Operator MCG HP Operator DCM RX Supervisor DRM

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 56 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: US/CA AT 170 M. Free Field

Reactor Power Level Required 500 watts Reactor Mode : (SS) PP

Linear Level 63 Range 3×10^{-6} Duration: MIN FOR DATA mins(secs)

1/e Level 23 Range 3×10^{-6} Estimated Peak Temperature $\leq 100^{\circ}C$

TIME: 1/e 1320 41 Shutdown 1430 CD

Time	1322 41	1430 CD			
Linear Level	63	✓			
Linear Range	3×10^{-6}	✓			Servo @ 57.5
Log N	4.1	✓			
T/C # 7	30.0	93.0			51.6×10^{-8} Picoamps Backing
T/C #8	30.0	90.0			
SB	11.582	✓			
MAR	5.500	✓			
RR	1.011	2.670			
RX Power	500 kilowatts	✓			

Time above 350°C None Integrated Power (Instru) 35.0 kw Mins

Duration of Operation 70 mins Integrated Power (Sulfur)

Remarks No Cooling " B " Tower Notified N/A

Operator (sign) MC Gregg Supervisor (sign) DMcDonald

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-229

Date 24 AUG 92

Experiment X20-85 Approval TPC #12-92 TPC # 5-92 Dosimetry on exp

Exp. Location 170 m Dist to RX C/L 170 m EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL on B10 Shield on Safety tube on RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 56 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: US/CAN @ 170 Meters Free Field

Reactor Power Level Required 50 Watts Reactor Mode : (SS) PP

Linear Level 63 Range 3×10^{-7} Duration: MIN FOR DATA mins(secs)

1/e Level 23 Range 3×10^{-7} Estimated Peak Temperature $\leq 100^{\circ}C$

TIME: 1/e 1526 45 Shutdown 1648 45

Time	1528 43	1648 45			
Linear Level	63	/			
Linear Range	3×10^{-7}	/			
Log N	0.41	/			Servo = 57.5
T/C # 7	69.3	63.5			
T/C #8	69.7	63.6			P_{inv} = 47.8 $\times 10^{-9}$
SB	11.591	/			
MAR	5.500	/			
RR	2.394	2.160			
RX Power	50 W	/			

Time above 350°C NONE Integrated Power (Instru) 4.1 Kw Mins

Duration of Operation 82 mins Integrated Power (Sulfur)

Remarks No Cooling " B " Tower Notified ✓ Greg Hoy @ 1650

Operator (sign) MC Dougan Supervisor (sign) Darrell R. Harrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5592 - 236

Date 25 AUG 92

Experiment X20-85 Approval TPC 12-92 TPC 5-92 Dosimetry ON EXP

Exp. Location 135 METERS Dist to RX C/L 135 M. EXP INSP BY HGD

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY HGD

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY HGD

RX Operator DRH HP Operator DCM RX Supervisor HGD

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 52 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: ROSPEC @ 135 METER

Reactor Power Level Required 100 W Reactor Mode : (SS) PP

Linear Level 38 Range 10^{-6} Duration: MIN FOR DATA ~~60 MIN~~ ~~3600+~~ secs)

1/e Level 14 ~~CAL~~ Range 10^{-6} ~~1000 AM START 60~~ Estimated Peak Temperature ≤100°C

TIME: 1/e 0946 22 Shutdown 1105 22

Time	0948 22	1105 22			
Linear Level	38	—			
Linear Range	10^{-6}	—			0065 22 1105 22
Log N	.8	—			0946 22 1900
T/C # 7	29.0	44.6			77 60 4740
T/C #8	28.3	43.3			
SB	11.582	—			79 MINS .1 KW 7.9
MAR	5.102	—			
RR	2.304	2.542			
RX Power	100W	—			

Time above 350 °C NONE Integrated Power (Instru) 7.9 KW·MINS

Duration of Operation 79 MINS Integrated Power (Sulfur) _____

Remarks NO COOLING " B " Tower Notified N/A

Operator (sign) DMHamell Supervisor (sign) HGDubyoski

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5592-231

Date 25 AUG 92

Experiment X20-85 Approval TPC 12-92 TPC 5-92 Dosimetry ON EXP

Exp. Location 400 METERS Dist to RX C/L 400 M. EXP INSP BY HGD

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY HGD

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY HGD

RX Operator DRH HP Operator DCM RX Supervisor HGD

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 52 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: ROSPEC @ 400 M

Reactor Power Level Required 3 KW Reactor Mode : (SS) PP

Linear Level 38 Range $3X10^{-5}$ Duration: MIN. FOR DATA mins(secs)

1/e Level 1¢ Range $3X10^{-5}$ Estimated Peak Temperature $\leq 250°C$

TIME: 1/e 1306 1¢ Shutdown 1421 1¢

Time	1308 1¢					
Linear Level	38					
Linear Range	$3X10^{-5}$					1421 1¢
Log N	26					1306 1¢
T/C # 7	56	62.1				1:15 00
T/C #8	53	150.4				75 / 3
SB	11.583					225 KW-MINS
MAR	5.549					
RR	1.850	3.412				
RX Power	3KW					

Time above 350 °C NONE Integrated Power (Instru) 225 KW-MINS

Duration of Operation 75 MINS Integrated Power (Sulfur)

Remarks COOLING ON " B " Tower Notified N/A

Operator (sign) [signature] Supervisor (sign) [signature]

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-232

Date 25 AUG 92

Experiment X20-85 Approval TPC 12-92 TPC 5-92 Dosimetry ON EXP

Exp. Location 400Meters Dist to RX C/L 400M EXP INSP BY HGD

RHD Track # 6 Height MAK UP Dist to Bldg Ctr MAK OUT RHD INSP BY HGD

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY HGD

RX Operator DAK HP Operator DCM RX Supervisor HGD

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 52 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: ROSPEC @ 400M

Reactor Power Level Required 3KW Reactor Mode : (SS) PP

Linear Level 38 Range 3X10^{-5} Duration: MIN FOR DATA mins(secs)

1/e Level 14 Range 3X10^{-5} Estimated Peak Temperature ≤ 250 °C

TIME: 1/e 1523 41 Shutdown 1553.41

Time	1525 41	1553 41			
Linear Level	38	—			
Linear Range	3X10^{-5}	—			
Log N	26	—			
T/C # 7	54.9	149.5			
T/C #8	51.5	138.5			
SB	11.589	—			
MAR	5.337	—			
RR	2.260	3.582			
RX Power	3KW	3KW			

Time above 350 °C NONE Integrated Power (Instru) 90 KW-MW

Duration of Operation 30 MIN Integrated Power (Sulfur)

Remarks Cooling ON " B " Tower Notified Yes

Operator (sign) DKeel Supervisor (sign) HG Dabzynski

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS 92-233

Date 26 AUG 92

Experiment X20-85 Approval TPC 12-92 TPC 5-92 Dosimetry ON EXP.

Exp. Location 400METERS Dist to RX C/L 400M EXP INSP BY DRH

RHD Track # 6 Height ~~MAX UP~~ Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B CHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: ROSPEC @ 400 METERS

Reactor Power Level Required ~~500 WATTS~~ /KW Reactor Mode : (SS) PP

Linear Level ~~63~~ 38 Range ~~3X10-6~~ 10-5 Duration: MIN. FOR DATA mins(secs)

1/e Level ~~23~~ 14 mw Range ~~3X10-6~~ 10-5 Estimated Peak Temperature ≤ 240°C

TIME: 1/e 1005 42 Shutdown 1205 42

Time	1007 42	1205 42			
Linear Level	38	/			
Linear Range	10^{-5}	/			
Log N	8.5	/			
T/C # 7	34.0	210.5			
T/C #8	33.0	206.8			
SB	11.582	/			
MAR	5.350	/			
RR	1.850	4.914			
RX Power	1KW	/			

Time above 350°C NONE Integrated Power (Instru) 120.0 Kw Mins

Duration of Operation 2 HRS Integrated Power (Sulfur)

Remarks No Cooling " B " Tower Notified N/A

Operator (sign) MC Morgan Supervisor (sign) DRHarwell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5592-234

Date 26 AUG 92

Experiment X20-85 Approval TPC 5-92 TPC 12-92 Dosimetry ON ERP

Exp. Location 450 METERS 40'1½" Dist to RX C/L 450 M 149'10" EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: Rospec @ ~~[illegible]~~ 450 meters US/CA

Reactor Power Level Required 1.5KW Reactor Mode : (SS) PP MIN. FOR DATA

Linear Level 57 Range 10-5 Duration: _____ mins(_____ secs)

1/e Level 21 Range 10-5 Estimated Peak Temperature ≤320°C

TIME: 1/e 1338 54 Shutdown 1456 54

Time	1340 54	1456 54				
Linear Level	57	✓				
Linear Range	10-5	✓			1456 54	78
Log N	13	✓			1338 54	1.5
					1:18 60	390
T/C # 7	44.0	100.7				78
T/C #8	43.0	93.9				117.0
SB	11.586	✓				
MAR	5.250	✓				
RR	2.300	3.030				
RX Power	1.5 kw	✓				

Time above 350°C NONE Integrated Power (Instru) 117.0 Kw Mins

Duration of Operation 78 mins Integrated Power (Sulfur) _____

Remarks Cooling w/o Vortex " B " Tower Notified Burke @ 1458

Operator (sign) MC Gregg Supervisor (sign) DRHarrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG (revised 1 Oct 89) 450 meters

Operation No. 5592-235

Date 27 AUG 92

Experiment X20-85 Approval TPC 5-92 12-92 Dosimetry ON EXP.

Exp. Location 450 METERS Dist to RX C/L 450 N EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 56 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: ~~BOOSTER~~ 450 METERS BF3 & Germanium US/CA@↑ detectors

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Reactor Power Level Required 1.5 KW Reactor Mode : (SS) PP

Linear Level 57 Range 10^{-5} Duration: MIN. FOR DATA mins(secs)

1/e Level 21 Range 10^{-5} Estimated Peak Temperature ≤ 250 °C

TIME: 1/e 0951 20 Shutdown 1103 20

Time	0953 20	1103 07			
Linear Level	57	✓			
Linear Range	10^{-5}	✓			
Log N	13	✓			
T/C # 7	38.0	98.9			
T/C #8	36.0	92.6			
SB	11.582	✓			
MAR	4.930	✓			
RR	2.800	3.520			
RX Power	1.5 KW	✓			

Time above 350 °C NONE Integrated Power (Instru) 108.0 Kw Mins

Duration of Operation 72 MINS Integrated Power (Sulfur)

Remarks Cooling W/O Vortex " B " Tower Notified N/A

Operator (sign) MC Gregor Supervisor (sign) D M Harrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)
US/CAN.

Operation No. SS92-236

Date 27 AUG 92

Experiment X20-85 Approval TPC# 5-92 12-92 Dosimetry On exp

Exp. Location 300 Meters Dist to RX C/L 300 meters EXP INSP BY HFC

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY HFC

Rx Core 5B GHL On B10 Shield On Safety tube On RX. INSP BY HFC

RX Operator MCG HP Operator DCM RX Supervisor HFC

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 56 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: US Rospec, BF_3, BgO
CAN → BF_3, BgO

Reactor Power Level Required 500 Watts Reactor Mode : (SS) PP

Linear Level 63 Range 3×10^{-6} Duration: MIN FOR DATA mins( ) secs)

1/e Level 23 Range 3×10^{-6} Estimated Peak Temperature $\leq 150^{\circ}C$

TIME: 1/e 1253 45 Shutdown 1411 45

Time	1255 45	1411 45			
Linear Level	63	/			
Linear Range	3×10^{-6}	/			
Log N	4.5	/			
T/C # 7	42.7	109.9			
T/C #8	42.3	107.8			
SB	11.590	/			
MAR	4.800	/			
RR	3.150	4.114			
RX Power	500 watts	/			

Time above 350 °C None Integrated Power (Instru) 39.0 Kw Mins

Duration of Operation 78 Mins Integrated Power (Sulfur) _____

Remarks Cooling OFF " B " Tower Notified N/A

Operator (sign) MC Gwyn Supervisor (sign) HFC

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5592-237

US/CAN

Date 27 Aug 92

Experiment X20-85 Approval TR# 5-92 12-92 Dosimetry ON EXP.

Exp. Location 300 Meters Dist to RX C/L 300 meters EXP INSP BY HFC

RHD Track # 6 Height Max. up Dist to Bldg Ctr Max. out RHD INSP BY HFC

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY HFC

RX Operator MCG HP Operator DCM RX Supervisor HFC

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 56 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: US/CAN @ same setup as #236

Reactor Power Level Required 50 watts Reactor Mode : (SS) PP

Linear Level 63 Range 3×10^{-7} Duration: 30 mins(1800 secs)

1/e Level 23 Range 3×10^{-7} Estimated Peak Temperature ≤ 100°C

TIME: 1/e 1458 19 Shutdown 1517 19

Time	1500 19	1517 19			
Linear Level	63	✓			
Linear Range	3×10^{-7}	✓			
Log N	0.43	✓			
T/C # 7	85.7	83.0			
T/C #8	85.7	83.2			
SB	11.586	✓			
MAR	4.449	✓			
RR	4.400	4.308			
RX Power	50 W	✓			

Time above 350°C NONE Integrated Power (Instru) 0.95 Kw hrs

Duration of Operation 19 mins Integrated Power (Sulfur)

Remarks No Cooling "B" Tower Notified Burke @ 1520

Operator (sign) MC Mayo Supervisor (sign)

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)
US/CA

Operation No. SS92-238

Date 28 AUG 92

Experiment X20-85 Approval TTC 5-92 12-92 Dosimetry ON EXP

Exp. Location Thru the Silo Dist to RX C/L Thru the Silo EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 53 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: US/CAN @ Rospec Bfr BgO
Thru the Silo (over)

Reactor Power Level Required 200 WATTS Reactor Mode : (SS) PP

Linear Level 76 Range 10^{-6} Duration: MIN. FOR DATA mins(secs)

1/e Level 28 Range 10^{-6} Estimated Peak Temperature $\leq 70^{\circ}C$

TIME: 1/e 0952 03 Shutdown 1109 03

Time	0954 03	1109 03			
Linear Level	76	/			77
Linear Range	10^{-6}	/			1.2
Log N	1.8	/			15.4
T/C # 7	30.0	59.0			
T/C #8	29.0	57.0			
SB	11.584	/			
MAR	4.820	3.275			
RR	2.880	/			
RX Power	200w	/			

Time above 350°C NONE Integrated Power (Instru) 15.4 Kw/Mins

Duration of Operation 77 Mins Integrated Power (Sulfur)

Remarks No Cooling " B " Tower Notified N/A

Operator (sign) MC Quigley Supervisor (sign) Darrell R. Harrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)
US/C1

Operation No. 5592-239

Date 31 AUG 92

Experiment X20-85 Approval TAC 5-92 " 12-92 Dosimetry ON EXP.

Exp. Location PAST TEST PAD ACROSS FENCE Dist to RX C/L (over) EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator DRH HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 59 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: RDSPEC MgO, BF_3

Reactor Power Level Required 20 WATTS Reactor Mode : (SS) PP

Linear Level 76 Range 10^{-7} Duration: MIN. FOR DATA mins(secs)

1/e Level 28 Range 10^{-7} Estimated Peak Temperature ≤ 100 °C

TIME: 1/e 1442 51 Shutdown 1557 51

Time	1444 51	1557 51			
Linear Level	76	✓			1422 40 START 30 M
Linear Range	10^{-7}	✓			
Log N	0.15	✓			
T/C # 7	26.0	29.8			10 W = 38 mA 10^{-7}
T/C #8	26.2	30.2			
SB	11.584	✓			
MAR	4.500	✓			
RR	3.332	3.398			
RX Power	20 W	✓			

Time above 350 °C NONE Integrated Power (Instru) 1.5 Kw Mins

Duration of Operation 75 MINS Integrated Power (Sulfur)

Remarks NO Cooling " B " Tower Notified Gwaltney @ 1600

Operator (sign) MC Burgin Supervisor (sign) Offutt

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

US/CA

Operation No. 5592-240

Date 1 SEPT 92

Experiment X 20-85 Approval TPC 5-92 12-92 Dosimetry ON EXP.

Exp. Location 700 METERS 40'1½" Dist to RX C/L 700 METERS 149'10" EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B CHL ON B10 Shield ON Safety tube ON RX. INSP BY ____

RX Operator DAK HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check DCM Log Book Reviewed ✓

Clearance # 52 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: ____

Reactor Power Level Required 7KW Reactor Mode : (SS) PP

Linear Level 26.7 Range 10^{-4} Duration: 300 mins(____secs)
OR MIN FOR DATA

1/e Level 9.7 Range 10^{-4} Estimated Peak Temperature ____

TIME: 1/e 1132 28 Shutdown 1517 28

Time	1134 28	1517 28			
Linear Level	26.7	—			
Linear Range	9.3	—			1477 28
Log N	45	—			1132-28 / 8.45 00
T/C # 7	76	305			180
T/C #8	67	301			225 x 7 = 1575
SB	11.584	—			
MAR	5.594	—			
RR	2.050	5.560			
RX Power	7KW	7KW			

Time above 350 °C NONE Integrated Power (Instru) 1575 KW-MIN

Duration of Operation 225 MIN Integrated Power (Sulfur) ____

Remarks Cooling On " B " Tower Notified Buzz 1518

Operator (sign) [signature] Supervisor (sign) Dowell R. Harrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS92-241

US/CA

Date 2 SEPT 92

Experiment X20-85 Approval TPC 5-92 TPC 12-92 Dosimetry ON EXP.

Exp. Location 700 METERS Dist to RX C/L 700 M. EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator DAK HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check DCM Log Book Reviewed ✓

Clearance # 52 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: CRANE @ 700 M

Reactor Power Level Required 7 KW Reactor Mode : (SS) PP

Linear Level 26.7 Range 10^{-4} Duration: MIN FOR DATA mins(secs)

1/e Level 9.8 Range 10^{-4} Estimated Peak Temperature ≤320°C

TIME: 1/e 0949 06 Shutdown 1349 06

Time	0951 04	1349 06			0951 06 #2 Linear 1×10^{-4}
Linear Level	26.7	26.7			PPM 1 5.7×10^{-4}
Linear Range	10^{-4}	10^{-4}			PPM 2 1.25×10^{-4}
Log N	47	47			
T/C # 7	69	302B			
T/C #8	62	288.1			
SB	11.584	11.514			240 MIN 7 KW
MAR 5.601	~~6.096~~	5.601			1680
RR	1.850	5.430			
RX Power	7KW	7KW			

Time above 350 °C NONE Integrated Power (Instru) 1680 KW-MIN

Duration of Operation 240MW Integrated Power (Sulfur)

Remarks Cooling ON " B " Tower Notified Hornbuckle 1350

Operator (sign) DJ Atkins Supervisor (sign) DMarcell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS 92-2-42

Date 3 SEPT 92

US/CA

Experiment X20-85 Approval TPC# 5-72, 12-92 Dosimetry ON exp

Exp. Location 400 meters Dist to RX C/L 400 m Rx CNTR BLDG 0'0" EXP INSP BY DRH

RHD Track #3 Height MAXUP Dist to Bldg Ctr ~~MAX OUT~~ RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 55 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: BgO & TLDS Rx Center of F BLDG

Reactor Power Level Required 3 KW Reactor Mode : (SS) PP (60 mins) MIN FOR DATA 3600 secs

Linear Level 38 Range 3x10-5 Duration: ____ mins(____ secs)

1/e Level 14 Range 3x10-5 Estimated Peak Temperature ≤ 300°C

TIME: 1/e 1318 31 Shutdown 1418 31

Time	1320 31	1418 21			
Linear Level	38	—			
Linear Range	3x10-5	—			3 60 180
Log N	20	—			
T/C # 7	46.0	150.9			
T/C #8	43.0	141.4			
SB	11.583	—			
MAR	4.834	—			
RR	3.100	4.316			
RX Power	3KW	—			

Time above 350°C NONE Integrated Power (Instru) 3 KW·Hrs / 180 KW·MINS

Duration of Operation 60 MINS Integrated Power (Sulfur) ____

Remarks COOLING ON " B " Tower Notified ____

Operator (sign) MC Dugi Supervisor (sign) Dowell R. Harrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. BS 93-71

Date 14 JUN 93

Experiment X20-85 Approval TDC # 5-92 Dosimetry ON exp

Exp. Location 300 METER Dist to RX C/L 300 METER EXP INSP BY DRH

RHD Track # 6 Height MAX ↑ Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL IN B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 55 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA – DOE BONNER SPHERES + 2 BF_3

Reactor Power Level Required 1 watt and 10 WATTS Reactor Mode : (SS) PP

Linear Level 38 Range $10^{-8}/10^{-7}$ Duration: MIN. FOR DATA mins(secs)

1/e Level 14 Range $10^{-8}/10^{-7}$ Estimated Peak Temperature ≤ 100 °C

TIME: 1/e 1239 49 Shutdown 1344 49

Time	1241 49	1306 49	1308 49	1344 49	
Linear Level	38	✓	38	✓	
Linear Range	10^{-8}	✓	10^{-7}	✓	@ 1 watt
Log N	0.009	✓	0.09	✓	@ 10 watts
T/C # 7	22.1	22.4	22.8	24.2	
T/C #8	22.0	22.5	22.7	24.2	
SB	11.587	✓	✓	✓	
MAR	4.017	✓	4.417	✓	
RR	4.111	4.051	3.404	3.415	
RX Power	1 watt	10 watts	✓	✓	

Time above 350 °C NONE Integrated Power (Instru) 407 watt mins

Duration of Operation 65 mins Integrated Power (Sulfur)

Remarks No Cooling " B " Tower Notified N/A

Operator (sign) MC Gregg Supervisor (sign) DRHarwell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5593-72

Date 14 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP.

Exp. Location 300 METERS Dist to RX C/L 300 METER EXP INSP BY DRH

RHD Track # 6 Height MAX UP Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 55 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA-DOE 12 aa BONNERSPHERES ~~etc~~.

Reactor Power Level Required 20 WATTS Reactor Mode : (SS) PP

Linear Level 76 Range 10^{-7} Duration: MIN. FOR DATA mins(secs)

1/e Level 28 Range 10^{-7} Estimated Peak Temperature $\leq$ 100°C

TIME: 1/e 1534 35 Shutdown 1635 00

Time	1536 35	1635 00			1634 60
Linear Level	76	✓			1534 35
Linear Range	10^{-7}	✓			1:00 25
Log N	1.8	✓			60.4 MINS
T/C # 7	26.6	30.0			20 WATTS
T/C #8	27.2	30.4			1208.0 WATT-MINS
SB	11.599	✓			
MAR	4.904	✓			
RR	2.650	2.878			
RX Power	20 WATTS	✓			

Time above 350 °C NONE Integrated Power (Instru) ~ 1.2 kw.m.n

Duration of Operation 60 MINS Integrated Power (Sulfur)

Remarks NO LOGGING " B " Tower Notified Mc Conway @ 1637

Operator (sign) MC Gregor Supervisor (sign) DRHarrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS93-73

Date 15 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXPS.

Exp. Location See Remarks Dist to RX C/L See Remarks EXP INSP BY DRH

RHD Track # 6 Height ~~MAX UP~~ PLUGGED Dist to Bldg Ctr MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ~~ON~~ PLUGGED BIO Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: ROSPEC, TLD, GERMANIUM, I.C. (300, 450, 300, 135, 700, ~~GHL~~, ~~700~~, ~~4H GATE~~)

AU FOILS IN FRENCH 170, * GHL PLUGGED

Reactor Power Level Required 1 KW Reactor Mode : (SS) PP

Linear Level 38 Range 10-5 Duration: 60 mins(3600 secs)

1/e Level 14 Range 10-5 Estimated Peak Temperature ≤ 250°C

TIME: 1/e 1024 38 Shutdown 1124 38

Time	1026 38	1124 38			
Linear Level	38	✓			
Linear Range	10-5	✓			
Log N	9	✓			
T/C # 7	29.7	69.0			
T/C #8	28.7	63.7			
SB	11.587	✓			
MAR	4.496	✓			
RR	3.412	3.794			
RX Power	1KW	✓			

Time above 350 °C NONE Integrated Power (Instru) 60 Kw Mins

Duration of Operation 1 HR Integrated Power (Sulfur)

Remarks Cooling On " B " Tower Notified N/A

Operator (sign) MC Hayes Supervisor (sign) DRHarnell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS93-74

Date 15 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP.

Exp. Location VARIOUS Dist to RX C/L See REMARKS EXP INSP BY HGD

RHD Track # 6 Height ~~MAX UP~~ PLUGGED Dist to Bldg Ctr MAX OUT RHD INSP BY HGD

Rx Core 5B GHL ON BIO Shield ON Safety tube ON RX. INSP BY HGD

RX Operator DRH HP Operator DCM RX Supervisor HGD

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA/DOE @ 2 Kms + SS93-73 SETUP EXCEPT FOR ROSPEC

Reactor Power Level Required 8 KW / 7.5 KW Reactor Mode : (SS) PP

Linear Level 30 Range 10^{-4} Duration: MIN. FOR DATA mins(secs)

1/e Level 11 Range 10^{-4} Estimated Peak Temperature ≤320°C

TIME: 1/e 1212 16 Shutdown 16/1446

Time	1214 16 (53 MINS)	1305 16 / 1242 16			FREEFIELD 20'
Linear Level	30	28.5		1864 76	S.C. #1 60%
Linear Range	10^{-4}	—		1212 16 / 5:12 60	#2 52%
Log N	75				#3 54%
T/C # 7	72.2	318.6		1671 46 / 1305 16	PPM #1 6.6×10^{-4}
T/C #8	69.0	298.0		2:66 30	#2 1.45×10^{-4}
SB	11.590	—		3:06½	LIN #2 1.1×10^{-4}
MAR	5,238	—		186.5	#3 7.9×10^{-6}
RR	2,640	6.290			53 MINS @ 8KW = 424
RX Power	8KW	7.5KW			186.5 " @ 7.5KW = 1398.75 / 1822.75

239.5

Time above 350 °C NONE Integrated Power (Instru) 1823 KW-MINS

Duration of Operation 239.5 MINS Integrated Power (Sulfur)

Remarks COOLING ON " B " Tower Notified ✓ WARD

Operator (sign) [signature] Supervisor (sign) [signature]

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS93-75

Date 16 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP.

Exp. Location VARIOUS Dist to RX C/L VARIOUS EXP INSP BY DRH

RHD Track # 6 Height 40'1½" MAX UP PLUGGED Dist to Bldg Ctr 149'10" MAX OUT RHD INSP BY DRH

Rx Core 5B GHL ON BIO Shield ON Safety tube ON RX. INSP BY DRH

RX Operator DAK HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 53 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA/DOE @ VARIOUS POSITIONS INSIDE AND OUTSIDE 1372 M AREA

Reactor Power Level Required 7.5 KW Reactor Mode : (SS) PP

Linear Level 28.5 Range 10^{-4} Duration: MIN FOR DATA mins(secs)

1/e Level 10.5 Range 10^{-4} Estimated Peak Temperature ≤ 320 °C

TIME: 1/e 0925 35 Shutdown 1133 00

Time	0927 35	1133 00			
Linear Level	28.5	27.8			1132 60
Linear Range	10^{-4}	10^{-4}			0925 35
Log N	70	68			2:07 25
T/C # 7	75	312.6			127.417 MINS
T/C #8	67	295.7			.75 KW
SB	11.588	—			955.6 KW-MINS
MAR	5.524	—			
RR	2.250	5.732			
RX Power	7.5KW	—			

Time above 350 °C NONE Integrated Power (Instru) 955.6 KW-min

Duration of Operation 127'25" Integrated Power (Sulfur)

Remarks Cooling ON " B " Tower Notified N/A

Operator (sign) DKW Supervisor (sign) [signature]

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5593-76

Date 17 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP

Exp. Location VARIOUS Dist to RX C/L VARIOUS EXP INSP BY HGD

RHD Track # 6 Height 40'1½" PLUGGED Dist to Bldg Ctr 149'10" RHD INSP BY HGD

Rx Core 5B GHL IN B10 Shield ON Safety tube ON RX. INSP BY HGD

RX Operator MCG HP Operator DCM RX Supervisor HGD

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 53 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA/DOE @ VARIOUS POSITIONS INSIDE AND OUTSIDE 1372M AREA - EQUIPMENT & DOSIMETRY ONLY

Reactor Power Level Required 7.5KW Reactor Mode : (SS) PP

Linear Level 28.5 Range 10^{-4} Duration: MIN FOR DATA mins(secs)

1/e Level 10.5 Range 10^{-4} Estimated Peak Temperature ≈322°C

TIME: 1/e 0915 57 Shutdown 1202 27

Time	0917 57	1202 27					
Linear Level	28.5	27.4 ~~7.5KW~~			FLUX	TEMP	
Linear Range	10^{-4}	/			#1 55	578	
Log N	72	/			#2 48	580	
T/C # 7	72.8	319.5			#3 48	318	
T/C #8	64.4	295.5			LN#2 1.5×10^4		
SB	11.589	/			LN#3 7.43×10^6		
MAR	5.813	/			PM#1 6.38×10^4		
RR	1.900	—			PM#2 1.40×10^4		
RX Power	7.5KW	/					

Time above 350°C None Integrated Power (Instru) ~~1248.8~~ 1248.8 Kw Mins *

Duration of Operation 9990 secs 166.5 mins Integrated Power (Sulfur)

Remarks Cooling On " B " Tower Notified N/A

Operator (sign) MC Gwin Supervisor (sign) HG Dalrymple

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

* - Average power about 7.4 KW. DECREASED OVER RUN AFTER ABOUT 1 HR but 7.5KW to 7.4KW & then 7.3KW to stay within temp limits.

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS 93-77

Date 17 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP

Exp. Location VARIOUS Dist to RX C/L VARIOUS EXP INSP BY HGD

RHD Track # 6 Height 40' 1½" Dist to Bldg Ctr 149' 10" RHD INSP BY HGD

Rx Core SB GHL IN B10 Shield ON Safety tube ON RX. INSP BY HGD

RX Operator MGG HP Operator DCM RX Supervisor HGD

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 53 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: SAME AS SS 93-76 EXCEPT MOVED FROM 2KM POSITION TO 1.6KM

Reactor Power Level Required 7.5KW Reactor Mode : (SS) PP

Linear Level 28.5 Range 10^{-4} Duration: MIN FOR DATA mins(secs)

1/e Level 10.5 Range 10^{-4} Estimated Peak Temperature ≤322°C

TIME: 1/e 1251 25 Shutdown 1642 08

Time	1253 25	1642 08			
Linear Level ADJ	28.5 27.7	27.4 ADJ			
Linear Range	10^{-4}	✓			Flux % Temp°
Log N	72	✓		#1	56 575
T/C # 7	85.3	319.6		#2	49 580
T/C #8	77.5	301.7		#3	50 330
SB	11.594	✓			PM#1 6.2×10^4
MAR	4.944	✓			PM#2 1.4×10^4
RR	3.343	7.110			LN#2 1.5×10^4
RX Power	7.5Kw	✓			LN#3 7.41×10^6

Time above 350°C NONE Integrated Power (Instru) 1730.40 Kw Mins

Duration of Operation _____ Integrated Power (Sulfur) _____

Remarks COOLING ON "B" Tower Notified Gwalthey @ 1645

Operator (sign) MC Gwin Supervisor (sign) HG Dubyoski

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

*NOTE: Reduced Power from 7.5kw → 7.3kw to stay within Temp. Limits MCG

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS93-78

Date 23 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP

Exp. Location 170 METERS Dist to RX C/L 170 METERS EXP INSP BY DRH

RHD Track # 3 Height 20' LIMIT Dist to Bldg Ctr CTT 16'0" RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator MCG HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA

Power Levels 100 watts, 1kw, 2kw, 4kw, 8KW

Reactor Power Level Required Various Reactor Mode : (SS) PP

Linear Level _____ Range _____ Duration: MIN FOR DATA _____ mins(_____secs)

1/e Level _____ Range _____ Estimated Peak Temperature ≤ 300°C

TIME: 1/e 1041 ~~DNA~~ Shutdown ~~1046 56 26~~ 1051

Time	1041 ~~DNA~~ 56	1043 56	1044 56	300 1046 56	480 1048 56	570 1051 26	2@ 100w 1@ 1KW 2@ 2KW 3.5@ 4 KW 1.5@ 8 KW
Linear Level	~~38~~	38	76	51	30.		
Linear Range	10-6	10^{-5}	10^{-5}	3×10^{-5}	10^{-4}		
Log N		9	19	40	80		
T/C # 7				57		113.0	
T/C #8				53		104.0	
SB	11.586						
MAR				4.580	4.527		
RR				3.585	4.200		
RX Power	100w	1KW 2KW		4KW	8KW	SHUTDOWN	

Time above 350°C NONE Integrated Power (Instru) ~~15.~~ 31.2 KW Mins

Duration of Operation 5 MINS Integrated Power (Sulfur) _____

Remarks No Cooling " B " Tower Notified N/A

Operator (sign) MC Hargis Supervisor (sign) DRHarnell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS93-79

Date 23 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP.

Exp. Location 170 METERS Dist to RX C/L 170 METERS EXP INSP BY DRH

RHD Track # 3 Height 20' LIMIT PLUGGED Dist to Bldg Ctr 16'0" CTT RHD INSP BY DRH

Rx Core 5B GHL ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator DAK HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA

10^{-6} 100 W, 10^{-5} 1KW, 10^{-5} 2KW, $3X10^{-5}$ 4 KW, 10^{-4} 8KW

38

Reactor Power Level Required _____ Reactor Mode : (SS) PP

Linear Level See above Range _____ Duration: _____ mins(_____ secs)

1/e Level _____ Range _____ Estimated Peak Temperature _____

TIME: 1/e 1159[39] Shutdown 1216[09]

Time	1201[39]	1202[39]	1206[39]	1209[39]	1214[39]	1216[09]	
Linear Level	38	38	76	51	30		
Linear Range	10^{-6}	10^{-5}	10^{-5}	$3X10^{-5}$	10^{-4}		
Log N	-.9	9.5	19	39	80		
T/C # 7	63.8			121	169		
T/C #8	63.6			114	158		
SB	11.593	—		—	—		
MAR	5.818	5,440 5,446	—	5,410	—		
RR	1,550	2,600 ~~3,000~~		3,050	3,850		
RX Power	100 W	1 KW	2 KW	4 KW	8 KW	Shutdown	

Time above 350 °C NONE Integrated Power (Instru) ~~46.14~~ 42.3 KW-MW

Duration of Operation 17 MIN Integrated Power (Sulfur) _____

Remarks Cooling off " B " Tower Notified NO

Operator (sign) DAK Supervisor (sign) DRHarnell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS93-80

Date 23 JUN 93

Experiment X20-85 Approval TPC 5-92 Dosimetry ON EXP.

Exp. Location 170 MOTORS Dist to RX C/L 170 M EXP INSP BY DRH

RHD Track # 3 Height 20' LIMIT Dist to Bldg Ctr 16'0" CT RHD INSP BY DRH

Rx Core 5B GHL PLUGGED ON B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator DAC HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # 51 APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: DNA

Reactor Power Level Required 4KW Reactor Mode : (SS) PP

Linear Level 51 Range $3X10^{-5}$ Duration: 60 mins(3600 secs)

1/e Level 19 Range $3X10^{-5}$ Estimated Peak Temperature ≤ 300°C

TIME: 1/e 1427 44 Shutdown 1527 44

Time	1430 44	1527 44			
Linear Level	51	—			
Linear Range	$3X10^{-5}$	—			
Log N	40	—			
T/C # 7	61	193			
T/C #8	56	180			
SB	11.595	—			
MAR	4.516	—			
RR	3.675	5.372			
RX Power	4KW	4KW			

Time above 350 °C NONE Integrated Power (Instru) 240 KW-MW

Duration of Operation 60 MW Integrated Power (Sulfur) _____

Remarks Cooling ON " B " Tower Notified Joe McGuire

Operator (sign) [signature] Supervisor (sign) [signature]

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS93-81

Date 6-25-93

Experiment X20-85 (4 ANGLES) Approval TPC 5-92 Dosimetry ON EXP

Exp. Location 20 & 40 Ft HORIZ. Dist to RX C/L ≈ 30'+45' EXP INSP BY DRH

RHD Track # 3 (BACK ON TO TK6) Height 20' LIMIT Dist to Bldg Ctr 0'0" RHD INSP BY DRH

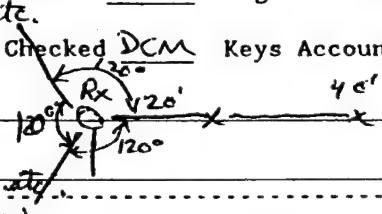
Rx Core SB GHL ON (PLUGGED) B10 Shield ON Safety tube ON RX. INSP BY DRH

RX Operator DAK HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check DCM Log Book Reviewed ✓

Clearance # 55 APRF Area Checked DCM Keys Accounted For

REMARKS: 2 KW-Hours FOR



OVER→

Reactor Power Level Required 8KW Reactor Mode : (SS) PP

Linear Level 30.4 Range 1×10^{-4} Duration: ~~120~~ 15 mins(900 secs)

1/e Level 11.2 Range 1×10^{-4} Estimated Peak Temperature ≤ 320°C

TIME: 1/e 1156 57 Shutdown 1211 57

Time	1158 57	1231 57			
Linear Level	30.4	—			
Linear Range	10^{-4}	—			
Log N	70	—			
T/C # 7	68	248			
T/C #8	58	226			
SB	11.596	—			
MAR	~~5.584~~	4.982			
RR	3,000	5,212			
RX Power	8KW	—			

Time above 350°C NONE Integrated Power (Instru) 120 KW-MIN

Duration of Operation 15 Min Integrated Power (Sulfur)

Remarks Cooling ON w/Outlet h 100°C " B " Tower Notified Adams 1215

Operator (sign) D Keel Supervisor (sign) D Harrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF PULSE LOG
(revised 1 Oct 89)

Pulse No. P93-~~89~~ 90 ~~DMA~~

Date 24 JUN 93

Experiment 20' DOS. SMALL ROLL UP DOOR Approval HOD/DRH Dosimetry ON EXP.

Exp. Location 170 M Dist to RX C/L 170 M 16'0" EXP INSP BY DRH

RHD Track # 3 Height 20' LIMIT Dist to Bldg Ctr CTF RHD INSP BY DRH

Rx Core 5B GHL ON PLUGGED B10 Shield ON Safety Tube ON RX. INSP BY DRH

RX Operator DAK HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance Requested ✓ APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: X 20-85 DNA Dosimetry — Y DETECTOR AT DOOR + 170

Yield 8.1×10^{16} F ρ 108.4 c T 24 us ΔT7 160 °C

Estimated Excess 38 c PR(+,0,-) 0 Kinetic Effect FAST

DELAYED CRITICAL

Time/at DC	0941 / 25 Min	
SB 1	11.588	
CRC # 1	6.8 $\times 10^3$	
CRC # 2	4.5 $\times 10^3$	
Linear # 1	38 $\times 10^{-5}$	
Linear # 2	1.3 $\times 10^{-4}$	
Log N	.101	
TC # 7 D8.8 +.03	25.1	
TC # 8	25.0	
MAR 7.873 1.382	8.192	
RR 36.24	5,000	
Excess	37.65	

Operator DAK Supervisor DMA

MINI PULSE

Time	0953		
RR Cal	use 19.074 t/in		
RR Pos	5.000 / 4.250		
PM # 1	242.7		
PM # 2 (241)	239.5		
PR Insert	204.0		
TC # 7	25.2		
TC # 8	25.0		
Avg PM's	241.1		

Operator DAK Supervisor DMA

Remarks: _____

PULSE CALCULATION

Avg SMP	91.89	> ρ 108.40	RR Crit Pos	5.000
ρ Withdrawn	14.30	106.17	RR Correction	+ .117
PR Worth 106.15	106.17 DMA	Δρ / RR" 2.23 / 19.07	RR Pulse 5.118	5.117

Operator DAK Supervisor DRH

F93-90

PULSE WAIT

1. Time Safety Block to Withdraw	0957
Total Wait Time	25
Calculated Time of Pulse	1022 DAK
Countdown Time	- 5
Calculated Time Safety Block to Insert	1017 DAK

2. Temperatures

	AT-SMP	End of Wait
TC 7	25.2	25.2
TC 8	25.0	25.0

p change, required / not required

ΔT7 _____ °C

Rod Withdrawn To —

3. Clearance #	51	8. Pulse rod unlatched	✓
4. Neutron generator ready	N/A	9. Timer reset	✓
5. Prompt Period Meters ready	✓	10. Fire alarm ready	✓
6. Pulse MODE to be used	MAN	11. Time SB to insert	1017 DAK
7. Pulse Detection Equip ready	✓	12. N_2 Trickle on	✓
		13. ★	✓

Operator DAK Supervisor DMcDonnell

PULSE DATA

Temperatures	TC 7	TC 8
After PULSE	184.6	164.1
At EOW	25.2	25.0
ΔT	159.4	139.1
Sulfur Factor	5.18	5.95
Yield	8.26	8.28
Avg Yield	8.27	

1. Time of Pulse 1022 PM: 25.4
2. Period: PM1 24.2 PM2 24.0
3. PR Insert time 203.3
4. Avg PM's 24.10 Alpha 41.5
5. Half Width 60 μsec
6. Sulfur _____

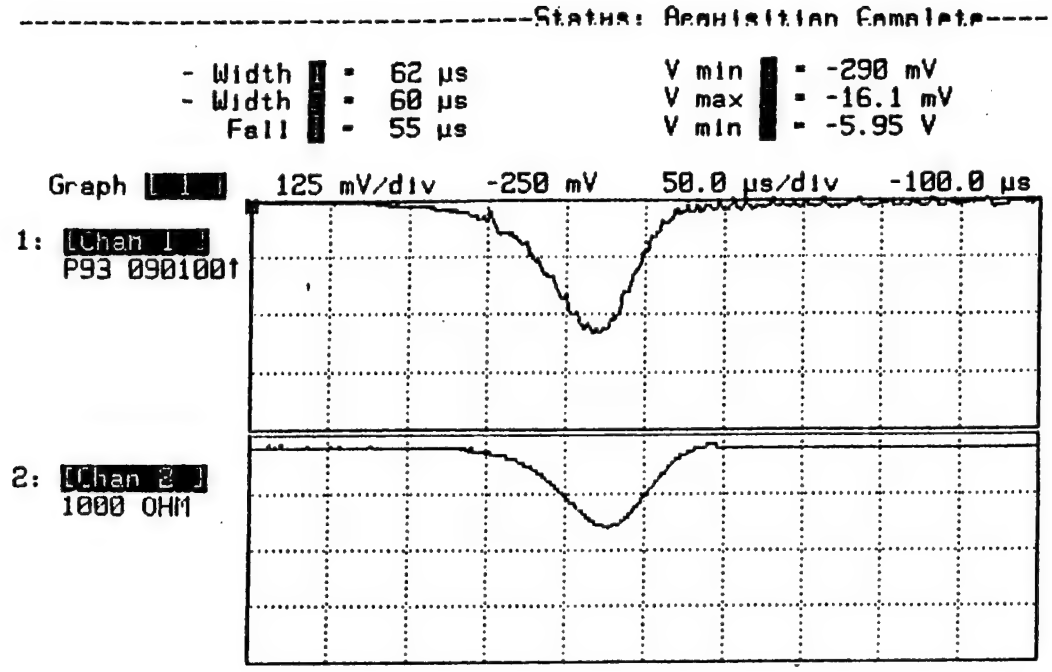
ΔT7/ΔT8 1.146 → 1.125 DAK

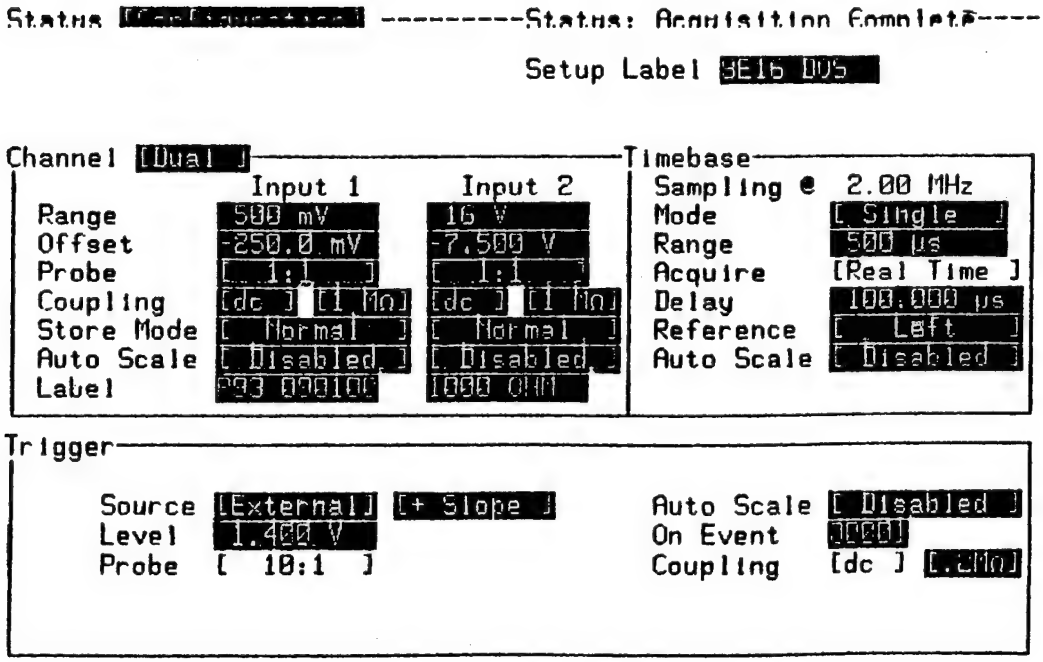
Fire Alarm Normal ✓ "B" Tower Notified NO -

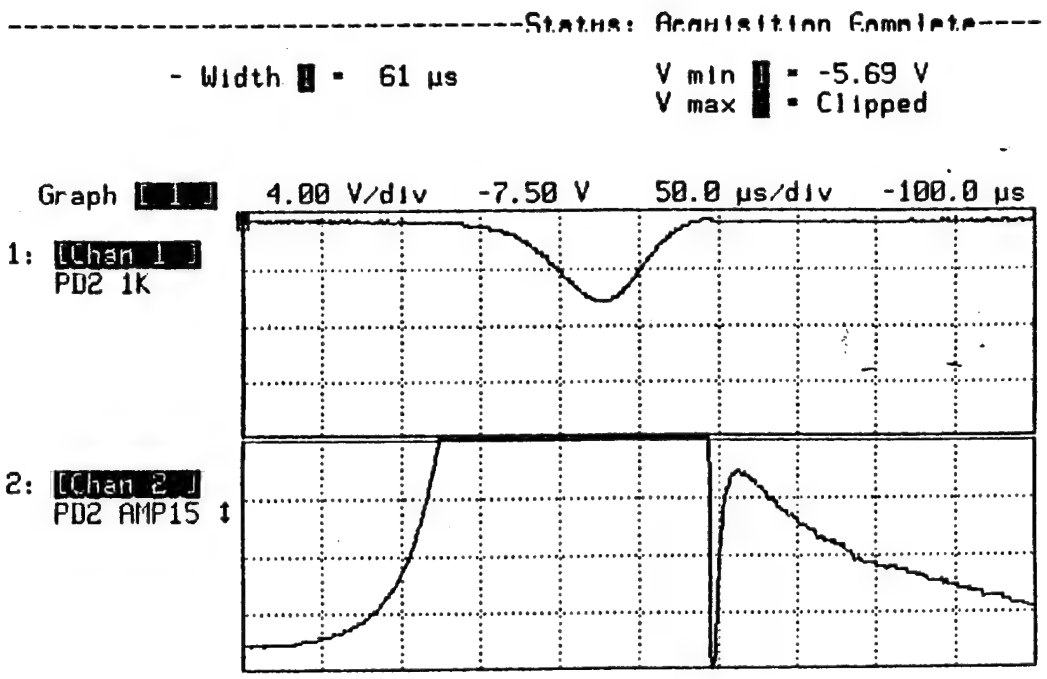
Remarks:

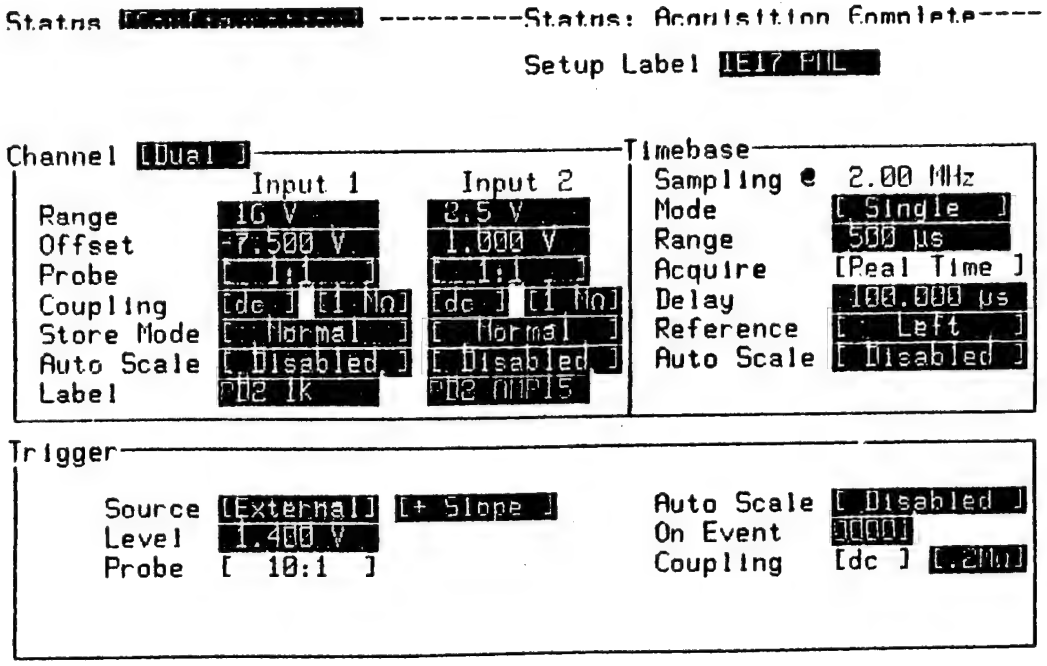
★ PD'S ON IKR ✓

P93-90


Status: Acquisition Complete
- Width = 62 µs
- Width = 60 µs
Fall = 55 µs
V min = -290 mV
V max = -16.1 mV
V min = -5.95 V
Graph [1]
125 mV/div -250 mV
50.0 µs/div -100.0 µs
1: [Chan 1]
P93 090100†
2: [Chan 2]
1000 OHM


Status
Status: Acquisition Complete
Setup Label
Channel [Dual]
Input 1
Input 2
Range 500 mV 16 V
Offset -250.0 mV -7.500 V
Probe [1:1] [1:1]
Coupling [dc] [1 MΩ] [dc] [1 MΩ]
Store Mode [Normal] [Normal]
Auto Scale [Disabled] [Disabled]
Label P93 090100 1000 OHM
Timebase
Sampling @ 2.00 MHz
Mode [Single]
Range 500 µs
Acquire [Real Time]
Delay 100.000 µs
Reference [Left]
Auto Scale [Disabled]
Trigger
Source [External] [+ Slope]
Level 1.400 V
Probe [10:1]
Auto Scale [Disabled]
On Event 0000
Coupling [dc] [1MΩ]


----------Status: Acquisition Complete----
- Width [ ] = 61 µs
V min [ ] = -5.69 V
V max [ ] = Clipped
Graph [1]
4.00 V/div
-7.50 V
50.0 µs/div
-100.0 µs
1: [Chan 1]
PD2 1k
2: [Chan 2]
PD2 AMP15


Status [ ] ---------Status: Acquisition Complete----
Setup Label [E17 PHL
Channel [Dual]
Input 1
Input 2
Range
16 V
2.5 V
Offset
-7.500 V
1.000 V
Probe
[1:1]
[1:1]
Coupling
[dc] [1 MΩ]
[dc] [1 MΩ]
Store Mode
[Normal]
[Normal]
Auto Scale
[Disabled]
[Disabled]
Label
PD2 1k
PD2 AMP15
Timebase
Sampling @ 2.00 MHz
Mode
[Single]
Range
500 µs
Acquire
[Real Time]
Delay
100.000 µs
Reference
[Left]
Auto Scale
[Disabled]
Trigger
Source
[External]
[+ Slope]
Level
1.400 V
Probe
[10:1]
Auto Scale
[Disabled]
On Event
[0000]
Coupling
[dc] [1MΩ]

APRF PULSE LOG
(revised 1 Oct 89)

Pulse No. P93-91

Date 24 JUN 93

Experiment 20' DOS. SMALL ROLL-UP DOOR Approval HGD/DRH Dosimetry ON EXP.

Exp. Location 170 M Dist to RX C/L 170 M 16'0" EXP INSP BY DRH

RHD Track # 3 Height 20'4 MIN Dist to Bldg Ctr CTT RHD INSP BY DRH

Rx Core SB GHL ON B10 Shield ON Safety Tube ON RX. INSP BY DRH

RX Operator DAK HP Operator DCM RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance Requested ✓ APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: X20-85 DNA DOS. -

Yield 8.2×10^{16} F ρ 108.40 ¢ T 24 us ΔT7 160 °C

Estimated Excess 38 ¢ PR(+,0,-) 0 Kinetic Effect FAST

DELAYED CRITICAL

Time/at DG	1253 / 25MW	
SB	11.594	
CRC # 1	6.5×10^{-3}	
CRC # 2	5.0×10^{-3}	
Linear # 1	38×10^{-8}	
Linear # 2	1.53×10^{-8}	
Log N	.01	
TC # 7 -.66	22.8	
TC # 8	22.7	
MAR 1.951	8.076	
RR 36.24	5,000	
Excess	37.54	

Operator DAK Supervisor DRH

MINI PULSE

Time	1257		
RR Cal	19.07 $/in		
RR Pos	5.000 / 4.250		
PM # 1	~~2479~~ DAK	2443	
PM # 2	~~2458~~ DAK	2453	
PR Insert	203.1		
TC # 7	22.9		
TC # 8	22.8		
Avg PM's	244.73		

Operator DAK Supervisor DRH

Remarks:

PULSE CALCULATION

Avg SMP 91.77 > ρ 108.40 RR Crit Pos 5,000

ρ Withdrawn 14.30 106.07 RR Correction +.122

PR Worth 106.07 $\frac{\Delta\rho}{RR"}$ 2.33 / 19.07 RR Pulse 5.122

Operator DAK Supervisor Duttarell

STECS-NE Form 535, 1 Oct 89

P93-91

PULSE WAIT

1. Time Safety Block to Withdraw	1300
Total Wait Time	~~25~~ 30
Calculated Time of Pulse	1330
Countdown Time	5
Calculated Time Safety Block to Insert	1325

2. Temperatures

	AT-SMP	End of Wait
TC 7	22.9	23.2
TC 8	22.8	23.1

p change, required (not required)

Δ T7 _____ °C

Rod Withdrawn To _____

3. Clearance # 51
4. Neutron generator ready N/A
5. Prompt Period Meters ready ✓
6. Pulse MODE to be used MAN
7. Pulse Detection Equip ready ✓
8. Pulse rod unlatched ✓
9. Timer reset ✓
10. Fire alarm ready ✓
11. Time SB to insert ✓
12. N_2 Trickle on ✓ 1325
13. PD's ON 1KΩ ✓

Operator DXul Supervisor BMHamell

PULSE DATA

Temperatures	TC 7	TC 8
After PULSE	172.6	150.4
At EOW	23.2	23.1
Δ T	149.3	127.3
Sulfur Factor	5.18	5.95
Yield	7.73	7.87
Avg Yield	7.65	

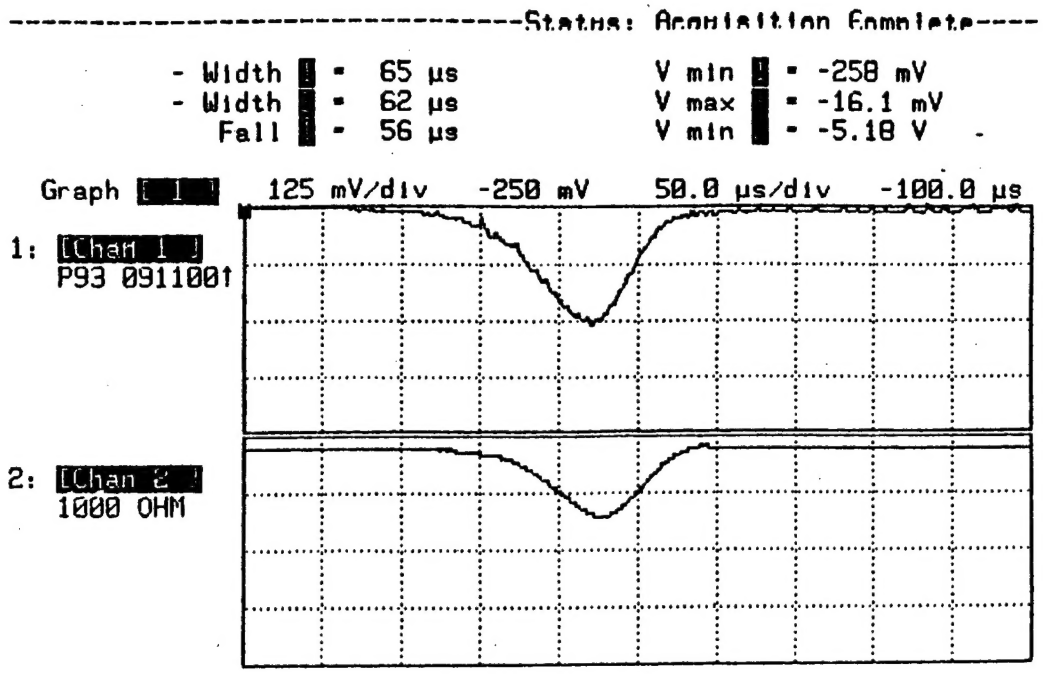
1. Time of Pulse 1330
2. Period: PH1 25.4 PH2 25.1
3. PR Insert time 207.0
4. Avg PH's 25.25 Alpha 39.6
5. Half Width 65 μSec
6. Sulfur

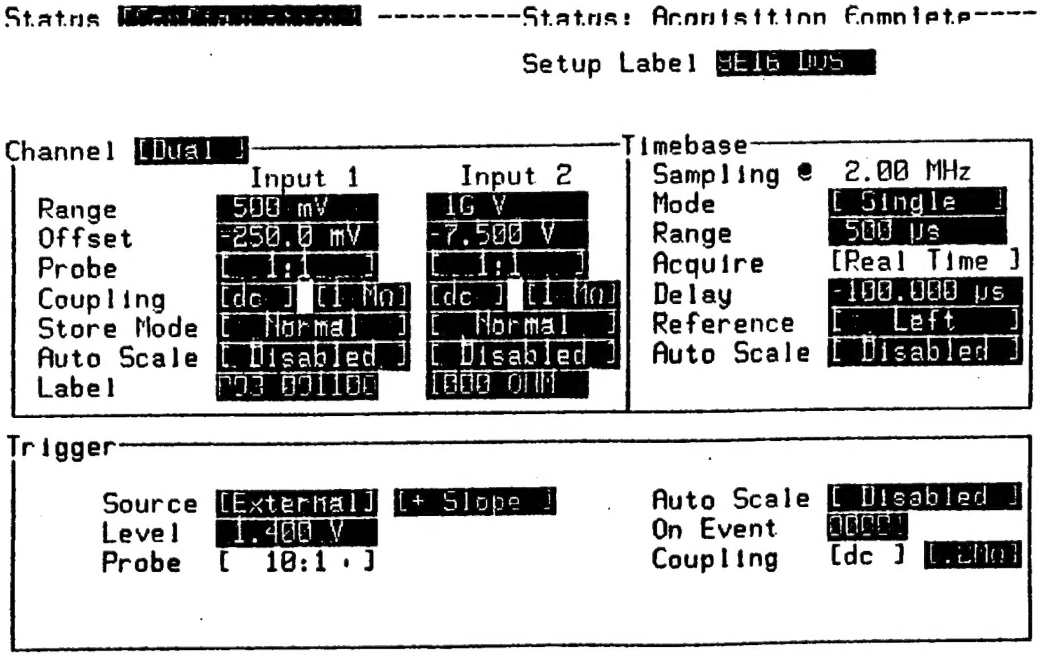
ΔT7/ΔT8	1.147

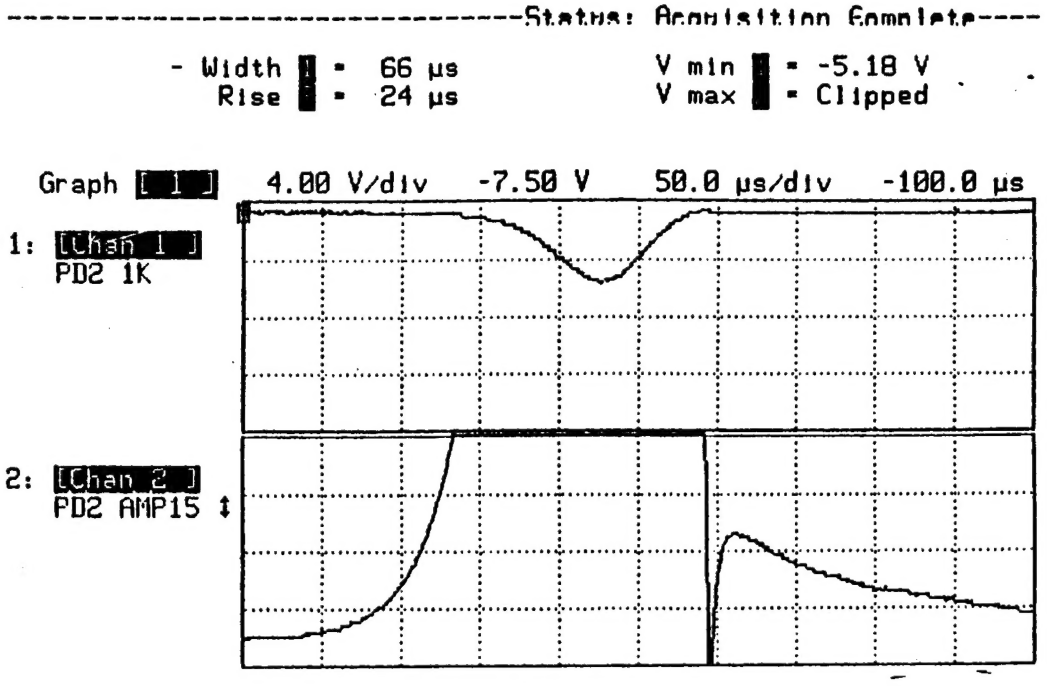
Fire Alarm Normal ✓ "B" Tower Notified Adams/1336

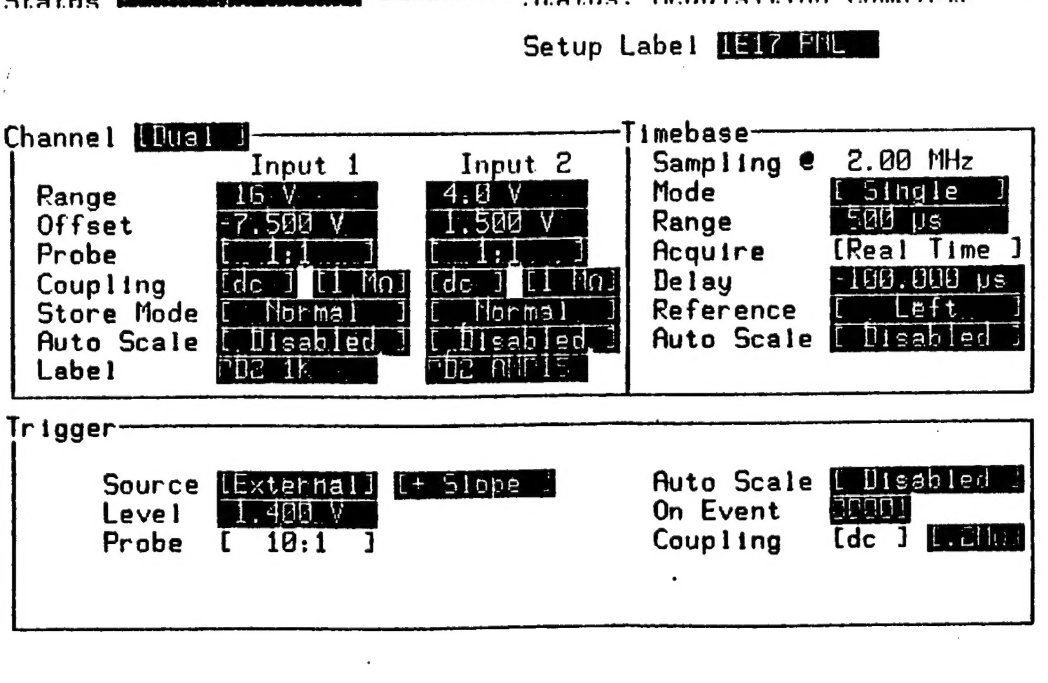
Remarks:

P93-91


Status: Acquisition Complete
- Width = 65 µs
- Width Fall = 62 µs
- Fall = 56 µs
V min = -258 mV
V max = -16.1 mV
V min = -5.18 V
Graph [1]
125 mV/div -250 mV
50.0 µs/div -100.0 µs
1: [Chan 1]
P93 091100
2: [Chan 2]
1000 OHM


Status: Acquisition Complete
Setup Label
Channel [Dual]
Input 1
Input 2
Range 500 mV 10 V
Offset -250.0 mV -7.500 V
Probe [1:1] [1:1]
Coupling [dc] [1 MΩ] [dc] [1 MΩ]
Store Mode [Normal] [Normal]
Auto Scale [Disabled] [Disabled]
Label P93 091100 1000 OHM
Timebase
Sampling 2.00 MHz
Mode [Single]
Range 500 µs
Acquire [Real Time]
Delay -100.000 µs
Reference [Left]
Auto Scale [Disabled]
Trigger
Source [External] [+ Slope]
Level 1.400 V
Probe [10:1]
Auto Scale [Disabled]
On Event
Coupling [dc] [1MΩ]


Status: Acquisition Complete
- Width = 66 µs
Rise = 24 µs
V min = -5.18 V
V max = Clipped
Graph [1]
4.00 V/div -7.50 V
50.0 µs/div -100.0 µs
1: [Chan 1]
PD2 1K
2: [Chan 2]
PD2 AMP15


Status [Real Time] Status: Acquisition Complete
Setup Label [E17 PHL
Channel [Dual]
Input 1
Input 2
Range 16 V 4.0 V
Offset -7.500 V 1.500 V
Probe [1:1] [1:1]
Coupling [dc] [1 MΩ] [dc] [1 MΩ]
Store Mode [Normal] [Normal]
Auto Scale [Disabled] [Disabled]
Label PD2 1K PD2 AMP15
Timebase
Sampling @ 2.00 MHz
Mode [Single]
Range 500 µs
Acquire [Real Time]
Delay -100.000 µs
Reference [Left]
Auto Scale [Disabled]
Trigger
Source [External] [+ Slope]
Level 1.400 V
Probe [10:1]
Auto Scale [Disabled]
On Event 00001
Coupling [dc] [1MΩ]

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. SS95-33

Date 11 JULY 95

Experiment X8-93 DOSIM. Approval HGD/DRH Dosimetry N/A

Exp. Location 300 M Dist to RX C/L 300 M (MAX OUT) EXP INSP BY HGD

RHD Track # 6 Height 40'1¾" (MAX UP) Dist to Bldg Ctr 149'10" RHD INSP BY HGD

Rx Core SB GHL ON B10 Shield ON Safety tube ON RX. INSP BY HGD

RX Operator WFL HP Operator DCM/GD RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # REMBOLDT APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: 4-20mR FEMA DOSIMETERS (STANLEY'S "HAND GRENADES")
PLUS GEIGER COUNTER & REM METER @ 300 M SITE.

Reactor Power Level Required 2 kW/4 kW Reactor Mode : (SS) PP

Linear Level 76/51 Range $10^{-5}/3\times10^{-5}$ Duration: 10/10 mins(600/600 secs)

1/e Level 28/19 Range $10^{-5}/3\times10^{-5}$ Estimated Peak Temperature ~250°C

TIME: 1/e 1329[41] Shutdown 1349[41]

Time	1331[41]	1337[41]	1349[41]		
Linear Level	76	51	—		
Linear Range	10^{-5}	3×10^{-5}	—		
Log N	18	38	—		
T/C # 7	39.3	90.0	141.0		
T/C #8	36.6	81.3	127.0		
SB	11.589	—	—		
MAR	5.120	5.389	—		
RR	2.400	2.511	3.196		
RX Power	2 kW	4 kW	—		

Time above 350 °C NONE Integrated Power (Instru) 60.0 KW-MIN

Duration of Operation 1200 SEC Integrated Power (Sulfur) _____

Remarks COOLING ON "B" Tower Notified NO

Operator (sign) WF Leavitt Supervisor (sign) DRHamrell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

APRF STEADY STATE LOG
(revised 1 Oct 89)

Operation No. 5595-34

Date 11 JULY 95

Experiment X8-93 DOSIM. Approval HGD/DRH Dosimetry N/A

Exp. Location 400 M Dist to RX C/L 400 M MAX OUT EXP INSP BY HGD

RHD Track # 6 Height 40' 1 3/4" MAX UP Dist to Bldg Ctr 149'10" RHD INSP BY HGD

Rx Core 5B CHL ON B10 Shield ON Safety tube ON RX. INSP BY HGD

RX Operator WFL HP Operator DCM/GD RX Supervisor DRH

RX Console Check ✓ HP Console Check ✓ Log Book Reviewed ✓

Clearance # REMBOLDT APRF Area Checked ✓ Keys Accounted For ✓

REMARKS: 4-20 mR FEMA DETECTORS + GEIGER COUNTER + REM METER @ 400 M SITE:

Reactor Power Level Required 3 kW/6 kW Reactor Mode : (SS) PP

Linear Level 38/76 Range 3×10^{-5} Duration: 20/20 mins (1200/1200 secs)

1/e Level 14/28 Range 3×10^{-5} Estimated Peak Temperature < 300°C

TIME: 1/e 1438-04 Shutdown 1518-04

Time	1440-04	1500-04	1518-04		
Linear Level	38	76	—		
Linear Range	3×10^{-5}	3×10^{-5}	—		LINEAR # 3:
Log N	28	56	—		3 kW: 11.4×10^{-6}
T/C # 7	50.2	149.2	240.1		6 kW: 22.8×10^{-6}
T/C #8	46.5	135.9	223.0		
SB	11.585	—	—		
MAR	4.996	5.202	—		
RR	2.770	3.692	4.988		
RX Power	3 kW	6 kW	—		

Time above 350°C NONE Integrated Power (Instru) 180.0 kW-MIN

Duration of Operation 2400 SEC Integrated Power (Sulfur) _____

Remarks COOLING ON ~~"B" Tower~~ PERRYMAN Notified REMBOLDT @ 1520

Operator (sign) WF Pheasant Supervisor (sign) D Mansell

STECS-NE Form 402, 1 Oct 89 (Previous editions of this form are obsolete)

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